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Lys Arg Leu Asn Leu Glu Val Arg Val His Asn Asn Leu Gln Asp Gly 85 90 95 Thr Glu Val <210> 1040 <211> 70 <212> PRT <213> Homo sapiens <400> 1040 Leu Leu Asp Leu Thr Asn Arg Leu Val Thr Cys Ile Asp Gln Ser Lys 1 5 10 . 15 . Pro Asn Ile Leu Ala Ser Leu Ser Leu Ala Glu Gln Thr Arg Val Gly · 20 25 30 Ile Trp Val Gly Ala Phe Ser Ile Lys Asp Asn Leu Ser Leu Cys Ser 35 40 45 Gln Gly Glu His Leu Cys Phe Val Leu Lys Ala Gly Ser Pro Trp Phe 50 55 60 Ala Asn Cys Leu Gln Glu 65 70 • • <210> 1041 <211> 48 <212> PRT <213> Homo sapiens <400> 1041 Met Leu Gln Tyr Thr Trp Leu Ile Leu Val Phe Leu Ser Ser Cys Leu 1 5 10 15 . Ser Ala Thr Trp Phe Cys Lys Val Val Val Ala Ala Ile Gly Ser Thr 20 25 · 30 . Val Gly Ser Ser Arg Leu His Phe Lys Arg Ser Gly Gln Cys Leu Arg 35 40 45 <210> 1042 <211> 48 <212> PRT <213> Homo sapiens <400> 1042 Met Leu Gln Tyr Thr Trp Leu Ile Leu Val Phe Leu Ser Ser Cys Leu 1 · 5 10 · 15 . 559

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Asn Ala Pro	Gly Gly Gl 180	y His		
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Ser Glu Leu 35	Leu His Th	r Tyr Ser S 40	er Ile Leu Gly Thr . 45	Asp Ile Leu .
Leu Leu Ile 50	Val Arg Le	u Ala Val L 55	eu Met Ala Val Thr : 60	Leu Thr Val
Pro Val Val 65		o Ile Arg S O	er Ser Val Thr His 75	Leu Leu Cys 80
Ala Ser Lys	Asp Phe Se 85	r Trp Trp A	rg His Ser Leu Ile 90	Thr Val Ser 95
Ile Leu Ala	Phe Thr As 100		al Ile Phe Val Pro .05	Thr Ile Arg 110
Asp Ile Phe 115	Gly Phe Il	e Gly Ala S 120	er Ala Ala Ser Met 125	Leu Ile Phe
Ile Leu Pro 130	Şer Ala Ph	e Tyr Ile L · 135	ys Leu Val Lys Lys 140	Glu Pro Met
Lys Ser Val 145	Gln Lys Il 15		eu Phe Phe Leu Leu 155	Ser Gly Val 160
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Asn Ala Pro	Gly Gly Gl 180	y His		

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Leu Val Lys Val Ser Glu Leu Ala Ala Phe Lys Val Val Val Gln Glu 55 60 50 Glu Gly Gly Ser Gly Leu Ser Leu Ile Lys Glu Thr Tyr Gln Xaa His 70 75 80 65 Arg Gly Arg Thr Arg Arg Trp Trp Glu Asn Val Gly Met Leu Leu Val 95 85 90 Pro Pro Gly Phe Leu Xaa Arg Arg Ser Cys Arg Ser Trp Cys Xaa Val 110 100 105 Val <210> 1055 <211> 2 <212> PRT <213> Homo sapiens <400> 1055 Ile Leu 1 <210> 1056 <211> 161 <212> PRT <213> Homo sapiens <400> 1056 Met Ala Glu Ala Ser Cys Gly Val Phe Trp Leu Leu Ser Leu Leu Cys 15 5 . 10 . . 1 Cys Ile Lys Glu Gln Gln Phe Glu Gln Val Val Ala Leu Leu Gln 20 25 -30 Ser Ile Arg Leu Cys Gln Asp Arg Ala Leu Leu Val Asn Asn Ala Tyr · 40· 35 45 Gln Gly Leu Ala Ser Leu Val Lys Val Ser Glu Leu Ala Ala Phe Lys 55 60 • 50 Val Val Val Gln Glu Glu Gly Gly Ser Gly Leu Ser Leu Ile Lys Glu 70 · . 75 80 65 Thr Tyr Gln Leu His Arg Asp Asp Pro Glu Val Val Glu Asn Val Gly 85 90 95 Met Leu Leu Val His Leu Ala Ser Tyr Glu Glu Ile Leu Pro Glu Leu 105 · 110 100 . Val Ser Ser Ser Met Lys Ala Leu Leu Gln Glu Ile Lys Glu Arg Phe 115 120 125 Thr Ser Ser Leu Glu Leu Val Ser Cys Val Glu Lys Val Leu Leu Arg

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Pro		· .
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Ala Ala Gly Met Arg A 50	arg Arg Arg Arg Leu Glr 55	Gln Glu Asp Gly Ile 60
Ser Phe Glu Tyr His A 65 .	arg Tyr Pro Glu Leu Arg 70 75	
Val Trp Leu Gln Cys 7 85	Chr Ala Ile Ser Arg Ile 90	• Tyr Thr Val Gly Arg 95
Ser Phe Glu Gly Arg ( 100	Slu Leu Leu Val Ile Glu 105	1 Leu Ser Asp Asn Pro 110
Gly Val His Glu Pro ( 115	Gly Glu Pro Glu Phe Ly: 120	s Tyr Ile Gly Asn Met 125
His Gly Asn Glu Ala V 130	/al Gly Arg Glu Leu Leu 135	1 Ile Phe Leu Ala Gln 140
	Tyr Gln Lys Gly Asn Glu 150 159	

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	Ile	His	Ser	Thr	Arg 165	Ile	His	Ile	Met	Pro 170	Ser	Leu	Asn	Pro	Asp 175	Gly	
	Phe	Glu	Lys	Ala 180	Ala	Ser	Gln	Pro	Gly 185	Glu	Leu	Lys	Asp	Trp 190	Phe	Val	
	Gly	Arg	Ser 195	Asn	Ala	Gln	Gly	Ile 200	Asp	Leu	Asn	Arg	Asn 205	Phe	Pro	Asp	
	Leu	Asp 210	Arg	Ile	Val	Tyr	Val 215	Asn	Glu	Lys	Glu	Gly 220	Gly	Pro	Asn	Asn (	
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	Ala	Pro	Glu	Thr	Lys 245	Ala	Val	Ile	His	Trp 250-		Met	Asp	Ile	Pro 255	Phe	
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	Tyr	Asp	Glu 275	Thr	Arg	Ser	Gly	Ser 280	Ala	His	Glu	Tyr	Ser 285	Ser	Ser	Pro	
•	Asp	Asp 290	Ala	Ile	Phe	Gln	Ser 295	Leu	Ala	Arg	Ala	туr 300	Ser	Ser	Phe	Asn	
	Pro 305,		Met	Ser	Asp	Pro 310	Asn	Arg	Pro	Pro	Cys 315	Arg	Lys	Asn	Asp	Asp 320	
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	Glu	Ile	Thr 355		Glu	Leu	Ser	Суз 360	Glu	Lys	Phe		Pro 365	Glu	Glú	Thr	
	•	370					375		-			380				Leu .	
	385			,	Arg	390					395					400	
					Asn 405					410		-		-	415	_	
•				420	Lys			•	425			•		430			
			.435		Thr		•	440		_	_		445			-	
		450			Pro	•	455					460					
	Glu 465	Ser	Phe	Ser	Glu	Arg 470	Lys	Glu	Glu	Glu	Lys 475	Glu	Glu	Leu	Met	Glu 480	

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Phe Phe Arg Gly

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Leu Ser Pro Val Gly Arg Val Asp Ser Thr Ala Ser Thr Ser Arg Ala 145 150 155 160 . Gly Pro Asp Leu Leu Val Arg Arg Ala Val Val Ala Leu Pro Leu Glu 165 170 175 Glu Val Ala His Gln Asp Ala Gln Gln Pro His Glu Ala Glu Asp Arg 180 185 190 Asp Asp Gly Asp Asp Arg Val Leu Gly Gly Cys Leu Leu Trp Ala Thr 195 200 205 Cys Pro Gly Ala Val Pro Arg Leu Pro Cys Leu Thr Thr Ala Ala Gly 210 . 215 220 Pro Cys Cys His Leu His Ala Thr Ser Gly Pro Pro Pro Pro Leu Ile 225 230 235 240 Thr Ala Met Ser Thr Gln Arg Cys Pro Gly Thr Trp Leu Thr Trp Asn . 245 250 255 Ala Gly Asn Pro Pro Arg Pro Lys Pro Pro Arg Pro Ala Val Ser Thr 260 265 270 Glu Cys Ile Ser Ser Cys His Ala His Leu Gly Leu Gln Pro Pro Pro 275 280 285 Lys Ala Ala Thr Gly Met Gly Leu Ala Trp Ala Gly Ala Pro Cys Ser 290 295 300

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Phe Val Val Gln Ile Thr Leu Ser Asn Ile Ser Ser Thr Asn Val Ser 20 25 . 30 • Ile Leu Val Phe Val His Thr Ala Ile Thr Ser Pro Leu Gln Thr Phe -35 40 45 · Gln Phe Trp His Tyr Glu Glu Val Ala Val Asn Leu Lys Tyr Leu 50 55 60 . <210> 1071 <211> 2 <212> PRT <213> Homo sapiens <400> 1071 Leu Gln 1 <210> 1072 <211> 2 <212> PRT <213> Homo sapiens <400> 1072 Leu Gln 1 <210> 1073 <211> 48 <212> PRT <213> Homo sapiens • • <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids · · <220> • <221> SITE <222> (42) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (44) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1073 . Met Gly Leu Arg Gln Gln Leu Glu Leu Lys Leu Lys Leu Ile Leu Leu <sub>,</sub> 5 1 10 15 Leu Cys Val Phe Trp Phe Lys Ser Cys Thr Tyr Ile Leu Ala Leu Leu 20 . 25 · 30 .

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Gly Asp Val Leu Val Arg Glu Thr Thr Val Ser Asp Ala Arg Pro Glu 65 70 75 80 Asp Arg Val His Phe Arg His Val Cys Xaa Pro Gln Xaa Lys Arg Val 85 90 95. Ser Leu Leu Asp Val Val Ile Ala Ala His Arg Leu Ile His Thr Lys 100 105 110 Gly Thr His Lys Ala Asn Tyr Cys Arg Arg His Thr Val Thr Arg Val 120 115 125 Arg Val Asp Val Val Arg Thr Glu Ala Arg Phe Lys Gln Leu Gly Arg 130 . 135 140 Gly Ile Thr Phe Pro Asp Ser Pro Leu Thr Arg Thr Glu His Thr Asp 145 150 155 160 Arg Phe Arg Pro Phe Phe Bhe Gln Xaa Gly Phe Glu Phe Leu Phe His 165 \_ 170 175 His Ile Glu Gly Leu Ile Pro Gly Asp Trp Gly Lys Phe Ala Phe Phe 180 · \_ · 185 190 Val Ile Phe Thr Val Phe His Thr Gln Gln Arg Leu Arg Gln Thr Val 195 200 205 Phe Thr Val His Asp Phe Gly Gln Glu Ile Ala Leu Asn Ala Val Gln 210 215 220 Ala Thr Val Asn Arg Cys Val Arg Val Ala Leu Thr Xaa Gln Xaa Xaa 225 230 235 240 Val Pro Ala Ala Phe Arg Pro Glu Arg Arg Asn Gln Xaa Arg Arg Thr · 250 245 255 Thr Gln Phe Ala Ile 260 . . <210> 1075 <211> 61 <212> PRT <213> Homo sapiens <400> 1075 Phe Tyr Thr Asn Val Thr Tyr Lys Ser Asp Ala Thr Thr Leu Arg Phe 1 5. 10 15 Pro Gly Arg Cys Asp Phe Ser Ser Ala Trp Glu Val Asp Leu His Gln 20 25 30 Pro Phe Gln Cys Ser Ala His Pro Gly Ala Gly Ile Thr Ala Pro His 35 40 • • 45 Leu Leu Gly Glu Lys Pro Gly Arg Pro Glu Glu Val Gly 50 55 60 .

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# MISSING AT THE TIME OF PUBLICATION

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Gly Gly Glu Arg His Leu His Arg Thr His Pro Arg Leu Pro Gly His · 10 5. 15 Arg Phe Leu Arg Leu His Arg Ala Pro Arg Val Pro His Val Cys Gly 20 . 25 30 Val Arg Ala His Gly Ala Gly Val Pro His Leu Val Ser Gly Gly Asp 40 35 45 Glu Val Ser Pro Gly Gly Ala Gly Pro Val Ser His Ser Ala Glu Glu 50 55 60 Gln Pro Val His Gln Val Asp Arg Leu Cys Gly Ala Cys Pro Gly Gln 70 . 75 80 Arg Val Phe Leu Cys Pro Gly Glu Pro Gly Ala Lys Ser Gly Arg His . 85 90 95 Leu Ser Gly Gly Val Pro Pro Tyr Thr Glu Cys Asp His Ala Gln Pro 100 105 110 Leu Ala Arg Pro Gly Ala Val Glu Ser Cys Asn His Glu Val Cys Ala 115 . 120 . 125 Gln Thr Gly Glu Thr Val Gln Pro Leu Met Ala Arg Arg 130 135 140 · <210> 1085 <211> 45 <212> PRT <213> Homo sapiens <400> 1085 Met Ser Met Lys Cys Tyr Leu Val Val Leu Ile Cys Ile Pro Leu Met 1 5 10 15 Ala Thr Asp Ala Glu Cys Leu Phe Leu Cys Leu Arg Ala Met Arg Ile 20 25 30 Ser Leu Glu Lys Gly Leu Ser Arg Ser Phe Ala Tyr Phe 35 40 45 <210> 1086 <211> 136 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids . • <220> <221> SITE <222> (3)

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			275					280					285			
	Met	Val 290	Gln	Cys	Leu	Gln	Gln 295	Lys	Glu	Gly	Glu	Glu 300	Leu	Val	Leu	Ser
	Lýs 305	Lys	Leu	Lys	Asn	Thr 310	Ile	Tyr	Pro	Leu	Thr 315	Val	Asp	Gly	Thr	Val 320
	Phe	Pro	Lys	Ser	Pro 325	Lys	Glu	Leu	Leu	Lys 330	Glu	Lys	Pro	Phe	His 335	Ser
	Val	Pro	Phe	Leu 340	Met	Gly	Val	Asn	Asn 345	His	Glu	Phe	Ser	Trp 350	Leu	Ile
	Pro	Arg	Gly 355	Trp	Gly	Leu	Leu	Asp 360	Thr	Met	Glu	Gln	Met 365	Ser	Arg	Glu
	Asp	Met 370	Leu	Ala	Ile	Ser	Thr 375	Pro	Val	Leu	Thr	Ser 380	Leu	Asp	Val	Pro
	Pro 385	Glu	Met	Met	Pro	Thr 390	Val	Ile	Asp	Glu	Tyr 395	Leu	Gly	Ser	Asn	Ser 400
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	Cys	Leu	Leu	Leu 20	Ala	Cys	Pro	Ala	Thr 25	Ala	Thr	Gly	Pro	Glu 30	Val	Ala
	Gln	Pro	Glu 35	Val	Asp	Thr	Thr	Leu 40	Gly	Arg	Val	Arg	Gly 45	Arg	Gln	Val
	Gly	Val 50	Lys	Gly	Thr	Asp	Arg 55	Leu	Val	Asn	Val	Phe 60	Leu	Gly	Ile	Pro
	Phe 65	Ala	Gln	Pro	Pro	Leu 70	Gly	Pro	Asp	Arg	Phe 75	Ser	Ala	Pro	His	Pro 80 .
					85	Gly				90					95	
				100					105					110		Asn
			115	•		Phe		120					125			-
	Val	Tyr	Ser	Pro	Ala	Glu	Val	Pro	Ala	Gly	Ser	Glv	Arg	Pro	Val	Met

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Val 145	Tŗp	Val	His	Gly	Gly 150	Ala	Leu	Ile	Thr	Gly 155	Ala	Ala	Thr	Ser	Tyr 160
Asp	Gly	Ser	Ala	Leu 165	Ala	Ala	Tyr	Gly	Asp 170	Val	Val	Val	Val	Thr 175	Val
Gln	Tyr	Arg	Leu 180	Gly	Val	Leu	Gly	Phe 185	Phe	Ser	Thr	Gly	Asp 190	Glu	His
Ala	Pro	Gly 195	Asn	Gln	Gly	Phe	Leu 200	Asp	Val	Val	Ala	Ala 205	Leu	Arg	Trp
Val	Gln 210	Glu	Asn	Ile	Ala	Pro 215		Gly	Gly	Asp	Leu 220	Asn	Cys	Val	Thr
Val 225	Phe	Gly	Gly	Ser	Ala 230	Gly.	Gly	Ser	Ile	Ile 235	Ser	Gly	Leu	Val	Leu 240
Ser	Pro	Val	Ala	Ala 245	Gly	Leu	Phe	His	Arg 250	Ala	Ile	Thr	Gln	Ser 255	Gly
Val	Ile	Thr	Thr 260	Pro	Gly	Ile	Ile	Asp 265	Ser	His	Pro	Trp	Pro 270	Leu	Ala
Gln	Lys	Ile 275		Asn	Thr	Leu	Ala 280	Cys	Ser	Ser	Ser	Ser 285	Pro	Ala	Glu
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Lys 305	Lys	Leu	Lys	Asn	Thr 310	Ile	Tyr `	Pro	Leu	Thr 315	Val	Asp	Gly	Thr	Val 320
Phe	Pro	Lys	Ser	Pro 325	Lys	Glu	Leu	Leu	Lys 330	Glu	Lys	Pro	Phe	His 335	Ser
Val ,	Pro	Phe	Leu 340	Met	Gly	Val	Asn	Asn 345	His	Glu	Phe	Ser	Trp 350	Leu	Ile
Pro	Arg	Gly 355	Trp	Gly	Leu	Leu	Asp 360	Thr	Met	Glu	Gln :	Met 365	Ser	Arg	Glu
Asp	Met 370	Leu	Ala	Ile	Ser	Thr 375	Pro	Val	Leu	Thr	Ser 380	Leu	Asp	Val	Pro
Pro 385	Glu	Met	Met	Pro	Thr 390	Val	Ile	Asp	Glu	Tyr 395	Leu	Gly	Ser	Asn	Ser 400
Asp	Ala	Ġln	Ala	Lys 405	Cys	Gln	Ala	Phe	Gln 410	Glu	Phe	Met	Gly	Asp 415	Val .
Phe .	Ile	Asn	Val 420	Pro	Thr	Val	Ser	Phe 425	Ser	Arg	Tyr	Leu	Arg 430	Asp	Ser
Gly	Ser	Pro 435	Val	Phe	Phe	Tyr	Glu 440	Phe	Gln	His	Arg	Pro 445	Ser	Ser	Phe
Ala	Lys 450	Ile	Lys	Pro	Ala	Trp 455	Val	Lys	Ala	Asp	His 460	Gly	Ala	Glu	Gly
								-							

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Ala Phe Val Phe Gly Gly Pro Phe Leu Met Asp Glu Ser Ser Arg Leu 465 470 475 480 Ala Phe Pro Glu Ala Thr Glu Glu Glu Lys Gln Leu Ser Leu Thr Met 490 485 495 Met Ala Gln Trp Thr His Phe Ala Arg Thr Gly Asp Pro Asn Ser Lys 500 505 510 Ala Leu Pro Pro Trp Pro Gln Phe Asn Gln Ala Glu Gln Tyr Leu Glu 515 520 525 Ile Asn Pro Val Pro Arg Ala Gly Gln Lys Phe Arg Glu Ala Trp Met 530 535 540 Gln Phe Trp Ser Glu Thr Leu Pro Ser Lys Ile Gln Gln Trp His Gln 545 550 555 560 Lys Gln Lys Asn Arg Lys Ala Gln Glu Asp Leu 565 570 <210> 1091 <211> 68 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (68) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1091 Met Ile Ser Ser Leu Leu Ser Lys Ala Val Leu Ser Leu Trp Ile Ser 1 5 10 15 Val Phe Ser Trp Asn Val Leu Gly Cys Lys Lys Leu Lys Thr Ile Ile 20 25 30 Leu Gln Cys Phe Lys Glu Ala Ser Asp Leu Val Leu Arg Glu Arg Tyr 35 40 45 Leu Gly Val Val Gln Ala Leu Ser Asp Asp Phe Ser Phe Cys Phe Thr 50 55 . 60 Ile Leu Ser Xaa 65 <210> 1092 <211> 56 <212> PRT <213> Homo sapiens <400>.1092 Val Ser Lys Leu Phe Asp Leu Val Arg Val Ala Leu Trp Glu Ser Thr. 1 5 15 10

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Phe Leu Ser Leu Ser Leu Ser Val Pro Ser Val Cys Ala Met Phe Arg 20 25 30 Ser Ser Glu Glu Ser Lys Ile Ser Ser Glu Phe Lys Ile Ile Phe Val 35 40 45 Phe Leu Leu Phe Asn Val Met Glu 50 55 <210> 1093 <211> 66 . 1.1 <212> PRT -<213> Homo sapiens <400> 1093 Met Ile Ser Ser Leu Leu Ser Lys Ala Val Leu Ser Leu Trp Ile Ser 1 5 10 15 Val Phe Ser Trp Asn Val Leu Gly Cys Lys Lys Leu Lys Thr Ile Ile 20 · 25 · 30 . Leu Gln Cys Phe Lys Glu Ala Ser Asp Leu Phe Leu Arg Glu Arg Tyr 35 40 45 Leu Gly Val Val Gln Ser Leu Ser Asp Asp Phe Phe Leu Leu His 50 55 60 . His Pro 65 • • <210> 1094 <211> 21 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (15) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1094 Arg Trp Arg Gly Ala Ser Thr Pro His Arg Asp Tyr Leu Ser Xaa Arg 1 · 5 10 . 15 Tyr Cys Ala Cys Gly 20 <210> 1095 <211> 11 <212>. PRT <213> Homo sapiens <400> 1095

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Asn Val Leu Ala Ser Xaa Xaa Gln Pro Xaa Gly Ile 65 <sup>·</sup> 7,0 75 . <210> 1098 <211> 54 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (26) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (27) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (36) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (40) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (44) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (47) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1098 Met Leu His Met Tyr Ser Gln Lys Asp Pro Leu Ile Leu Cys Val Pro 1 . 5 10 15 Pro Gly Arg Ala Ala Arg Gly Asp Pro Xaa Xaa Ala Ser Arg Ala Gly 20 25 30 Pro Tyr Pro Xaa Gly Pro Ala Xaa Ala Ala Phe Xaa Arg Gln Xaa Leu 45 35 40 Xaa Leu Gly Thr Thr Trp

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Pro Ile Arg Arg Ala Leu Gln Gln Leu Leu Phe Pro Gly Lys Ala Phe 35 40 45 Ser Trp Pro Arg His Val Ala Ile Ala Leu Ile Leu Leu Val Leu Val 55 60 50 Asn Val Leu Val Ile Cys Val Pro Thr Ile Arg Asp Ile Phe Gly Val 65 70 75 80 Ile Gly Ser Thr Ser Ala Pro Ser Leu Ile Phe Ile Leu Pro Ser Ile 85 90 95 Phe Tyr Leu Arg Ile Val Pro Ser Glu Val Glu Pro Phe Leu Ser Trp 100 105 110 Pro Lys Ile Gln Ala Leu Cys Phe Gly Val Leu Gly Val Leu Phe Met 115 120 125 Ala Val Ser Leu Gly Phe Met Phe Ala Asn Trp Ala Thr Gly Gln Ser 130 . 135 140 Arg Met Ser Gly His 145 <210> 1101 <211> 40 <212> PRT *د* ب <213> Homo sapiens <400> 1101 Met Ile Leu Arg Gly Val Tyr Ser Met Val Pro Ile Tyr Thr His Met 1 5 10 15 Ile Phe Leu Phe Thr Phe Phe Leu Thr Ile Ser Gly Lys Tyr Phe Lys 20 25 30 Ile Phe Glu Lys His Ser Arg Ile 35 40 <210> 1102 <211> 40 <212> PRT <213> Homo sapiens <400> 1102 Met Ile Leu Arg Gly Val Tyr Ser Met Val Pro Ile Tyr Thr His Met 1 5 • 10 . 15 Ile Phe Leu Phe Thr Phe Phe Leu Thr Ile Ser Gly Lys Tyr Phe Lys 20 25 30 Ile Phe Glu Lys His Ser Arg Ile 35 40

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Ser Lys Ser Pro Lys Tyr His Pro Val Phe Leu Leu Val Ile Ile Met 35 . 40 45 Ala Arg Ser Ser Gln Leu Lys Arg 50 55 . • <210> 1106 <211> 116 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (14) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (33) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1106 Val Gly Phe Gln Gly Leu Glu Gly Asn Pro Pro Pro Ala Xaa Leu Asn 1 5 10 15 Gly Leu Glu Gly Lys Gly Lys Leu Xaa Lys Lys Ala Gln Gly Thr Gly . 25 20 30 . Xaa Lys Ile Ile Phe Trp Pro Lys Glu Ser Lys Thr Pro Ser Gly Ser 35 40 45 Pro Lys Pro Ala Lys Ala Ala Asn Ser Lys Ser Lys Glu Ser Asp Glu 50 55 60 Pro His His Ser Lys Asn Glu Arg Pro Ala Arg Pro Pro Pro Pro Ile 65 70 75 80 Met Thr Asp Gly Glu Asp Ala Asp Tyr Thr His Phe Thr Asn Gln Gln 85 90 95 Ser Ser Thr Arg His Phe Ser Lys Ser Glu Ser Ser His Lys Gly Phe 100 105 110 His Tyr Lys His 115 <210> 1107 <211> 4 <212> PRT

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Ser Phe Cys Leu Ala Ile Phe Ser Ile Leu Gly Ala Val Arg Met Trp
20 25 30
Gly Ile Met Gly Thr Val Leu Leu Thr Gly Gly Leu Lys Gln Thr Val

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35		40	45	
Cys Phe Ile Asr 50	n Phe Ile Asp A 55	Asn Ser Thr Val	Lys Phe Trp Ser 60	Trp
Val Phe Leu Leu 65	ı Ser Lys Val I 70	Ile Glu Leu Gly 75	Asp Thr Ala Phe	Ile 80
Ile Leu Arg Lys	s Arg Pro Leu I 85	Ile Phe Ile His 90	Trp Tyr His His 95	Ser
Thr Val Leu Val 100	Tyr Thr Ser P )	Phe Gly Tyr Lys 105	Asn Lys Val Pro 110	Ala
Gly Gly Trp Phe 115		Asn Phe Gly Val 20	His Ala Ile Met 125	Tyr
Thr Tyr Tyr Thr 130	- Leu Lys Ala A 135	Ala Asn Val Lys	Pro Pro Lys Met 140	Leu
Pro Met Leu Ile 145	e Thr Ser Leu G 150	ln Ile Leu Ġln 155	Met Phe Val Gly	Ala 160
	Leu Thr Tyr I . 165	le Trp Arg Gln 170	Asp Gln Gly Cys 175	His
Thr Thr Met Glu 180	His Leu Phe T:	rp Ser Phe Ile 185	Leu Tyr Met Thr 190	Tyr
Phe Ile Leu Phe 195		Phe Cys Gln Thr 200	Tyr Ile Arg Pro 205	Lys
Val Lys Ala Lys 210	Thr Lys Ser G 215	ln ,		
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                                                            PCT/US01/11988
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                                          75
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His Tyr Ile Lys Val Ile Leu Leu
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                                  25
             20
                                                      30
Asp Leu Glu Val Lys Val Phe Cys Cys Tyr Cys Gly Leu Lys Tyr Leu
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                              40
                                                  45
Val Met Gly Glu Glu Cys Arg Val Val Ala Leu Ala Gln Thr Gln Glu
                        55
     50 .
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Asn Pro Phe Ser Pro Leu Phe Tyr Phe Cys Tyr Ser Asp His Leu Ser
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                                                               80
Pro Phe
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                                                         15
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              20
                                  25
                                                       30
Asp Leu Glu Val Lys Val Phe Cys Cys Tyr Cys Gly Leu Lys Tyr Leu
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                                                   45
 Val Met Gly Glu Glu Cys Arg Val Val Ala Leu Ala Gln Thr Gln Glu
     1,50
                          55 °
                                              60
                                                      .
 Asn Pro Phe Ser Pro Leu Phe Tyr Phe Cys Tyr Ser Asp His Leu Ser
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                                                               80
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Pro Phe

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Ser Gly Ser Thr Ser Asp Pro Ile His Leu Gly Pro Ser His Thr Trp 40 35 45 Arg Cys His Gln Trp Arg Leu Gln Asn Ser Lys Asp Gly Cys Leu Leu 55 . 60 50 Leu Pro Pro Gly Ser Pro Ser Gln Arg Glu Thr Asp Leu Met Leu Ala 70 75 65 80 Gly Met Leu Leu <210> 1129 · <211> 219 <212> PRT <213> Homo sapiens <400> 1129 Met Glu Met Ala Ser Lys Met Lys Asp Thr Gly Phe Ile Val Phe Ala 1 5 10 15 Val Leu Leu Val Ser Cys Leu Ile Leu Ile Phe Val Ile Ala Pro · 20 30 • 25 Arg Tyr Gly Gln Arg Asn Ile Leu Ile Tyr Ile Ile Ile Cys Ser Val .40 35 Ile Gly Ala Phe Ser Val Ala Ala Val Lys Gly Leu Gly Ile Thr Ile 50 55 60 Lys Asn Phe Phe Gln Gly Leu Pro Val Val Arg His Pro Leu Pro Tyr 70 75 65 80 Ile Leu Ser Leu Ile Leu Ala Leu Ser Leu Ser Thr Gln Val Asn Phe 85 95 90 . Leu Asn Arg Ala Leu Asp Ile Phe Asn Thr Ser Leu Val Phe Pro Ile 100 105 . 110 Tyr Tyr Val Phe Phe Thr Thr Val Val Val Thr Ser Ser Ile Ile Leu 115 120 125 Phe Lys Glu Trp Tyr Ser Met Ser Ala Val Asp Ile Ala Gly Thr Leu 135 140 130 Ser Gly Phe Val Thr Ile Ile Leu Gly Val Phe Met Leu His Ala Phe 150' 145 155 160 · Lys Asp Leu Asp Ile Ser Cys Ala Ser Leu Pro His Met His Lys Asn 165 170 175 Pro Pro Ser Pro Ala Pro Glu Pro Thr Val Ile Arg Leu Glu Asp . 180 185. . 190 Lys Asn Val Leu Val Asp Asn Ile Glu Leu Ala Ser Thr Ser Ser Pro 205 195 200 •

Glu Glu Lys Pro Lys Val Phe Ile Ile His Ser

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Pro Ala Ser Cys Leu Leu Ser Thr Phe Pro Xaa Xaa 245 250

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Gly Arg Leu Pro Gly Ala Ser Gln Ser Ser Gln Gly Pro Pro Pro Ala 115 120 125 Ser Ala Ser Leu Arg Ala Val Pro Lys 130 .135 <210> 1135 <211> 93 <212> PRT <213> Homo sapiens · . <220> <221> SITE <222> (34) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (76) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1135 Met Tyr Ala Leu Tyr Ile Thr Val His Gly Tyr Phe Leu Ile Thr Phe 5 1 . 10 15 Leu Phe Gly Met Val Val Leu Ala Leu Val Val Trp Lys Ile Phe Thr. 20 25 30 Leu Xaa Arg Ala Thr Ala Val Lys Glu Arg Gly Lys Asn Arg Lys Lys 35 40 45 Val Leu Thr Leu Leu Gly Leu Ser Ser Leu Val Gly Val Thr Trp Gly 50 55 60 Leu Ala Ile Phe Thr Pro Leu Gly Leu Ser Thr Xaa Tyr Ile Phe Ala 65 70 75 80 Leu Phe Asn Ser Leu Gln Ala Gln Arg Gly Ile Thr Val 85 90 <210> 1136 <211> '93 <212> PRT <213> Homo sapiens <400> 1136 Met Tyr Ala Leu Tyr Ile Thr Val His Gly Tyr Phe Leu Ile Thr Phe 1 -5 10 15 Leu Phe Gly Met Val Val Leu Ala Leu Val Val Trp Lys Ile Phe Thr 20 25 30 Leu Ser Arg Ala Thr Ala Val Lys Glu Arg Gly Lys Asn Arg Lys Lys 35 40 45

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Leu Ser Arg Ala Thr Ala Val Lys Glu Arg Gly Lys Asn Arg Lys Lys
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Val Leu Thr Leu Leu Gly Leu Ser Ser Leu Val Gly Val Thr Trp Gly
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Leu Phe Asn Ser Leu Gln Gly Val Phe Ile Cys Cys Trp Phe Thr Ile
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                              25
                                                30
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Thr Pro Asp Gly Gly Gln Leu Leu Asp Trp Ala Lys Gln Pro Asp
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                                             45
Ser Ser Gln Asp Pro Asp Pro Thr Thr Gln Pro Ile Val Leu Leu
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Val Asn Gln Ala Leu Arg Asp Gly Tyr Gln Ala Val Val Phe Asn Asn 85 90 95	
Arg Gly Cys Arg Gly Glu Glu Leu Arg Thr His Arg Ala Phe Cys Ala 100 105 110	
Ser Asn Thr Glu Asp Leu Glu Thr Val Val Asn His Ile Lys His Arg 115 120 125	
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Arg Pro Val Gln Ser Ala Ser Leu Met Ser Ala Thr His Leu Trp Pro 210 215 220	
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20 25 30	
202530Val Leu Glu Asp Asn Ser Ser Ser Val Asp Phe Ala Asp Leu Pro Ala 354045Leu Phe Gly Val Pro Leu Ala Pro Glu Gly Ile Arg Gly Tyr Leu Met	

Gly Asn Arg Ser Leu Gly Ala Ile Val Leu Ile Arg Arg Tyr Asp Cys 85 90 95 . Thr Phe Asp Leu Lys Val Leu Asn Ala Gln Arg Ala Gly Phe Glu Ala 100 105 110 Ala Ile Val His Asn Val His Ser Asp Asp Leu Val Ser Met Thr His 115 120 125 Val Tyr Glu Asp Leu Arg Gly Gln Ile Ala Ile Pro Ser Val Xaa Val 130 135 140 Ser Glu Ala Ala Arg Arg Thr Cys Gly Ser Ser Trp Ala Ala Thr Ser 145 150 155 . 160 Arg Pro Thr Arg Cys Pro Ala Asp Asp Pro Pro Cys His Asp Leu Ala 165 170 175 Val Thr Pro Cys 180 <210> 1141 <211> 225 <212> PRT . <213> Homo sapiens <220> <221> SITE <222> (21) <223> Xaa equals any of the naturally occurring L-amino acids -<220> <221> SITE <222> (45) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1141 Thr Gln Pro Cys Gln Arg Pro Gly Ile Val Thr Pro Val Leu Thr Val 1 · 5 10 15 Ser Trp Val Leu Xaa Cys Thr Leu Ala Leu Val Val Ser Ala Phe Phe 20 25 30 ۰, Val Leu Asn His Leu Trp Leu Trp Ala Gln Ala Cys Xaa Ser His Arg 35 40 .45 Arg Pro Val Lys Thr Ser Thr Cys Gln Lys Ala Gln Val Arg Thr Phe 50 55 . . 60 Thr Trp His Asn Asp Leu Cys Ala Ile Cys Leu Asp Glu Tyr Glu Glu . 70 65 75 80 Gly Asp Gln Leu Lys Ile Leu Pro Cys Ser His Thr Tyr His Cys Lys 85 90 95 Cys Ile Asp Pro Trp Phe Ser Gln Ala Pro Arg Arg Ser Cys Pro Val 105 ~ '110 100

Cys Lys Gln Ser Val Ala Ala Thr Glu Asp Ser Phe Asp Ser Thr Thr Tyr Ser Phe Arg Asp Glu Asp Pro Ser Leu Pro Gly His Arg Pro Pro Ile Trp Ala Ile Gln Val Gln Tyr Ala Pro Gly Gly Trp Ser Cys Trp Ala Ala Pro Val Pro Thr Ala Thr Ala Ala Pro Arg Pro Trp Arg Gln . Ser Ile Pro Leu Ser Pro Gln Pro Leu Leu Arg Pro Leu Val Ser Lys Asp Leu Gly Gln Gly Gly Gly Cys Asn Glu Glu Cys Phe Trp Ser Glu Lys Asn Lys Val Gly Leu Lys Ala Glu Lys Lys Lys Lys Lys Thr Arg <210> 1142 <211> 359 <212> PRT <213> Homo sapiens <400> 1142 Met Gly Trp Pro Arg Pro Gly Arg Ala Leu Val Ala Val Lys Ala Leu Leu Val Leu Ser Leu Leu Gln Val Pro Ala Gln Ala Val Val Arg Ala Val Leu Glu Asp Asn Ser Ser Ser Val Asp Phe Ala Asp Leu Pro Ala Leu Phe Gly Val Pro Leu Ala Pro Glu Gly Ile Arg Gly Tyr Leu Met Glu Val Lys Pro Ala Asn Ala Cys His Pro Ile Glu Ala Pro Arg Leu -65 . . . Gly Asn Arg Ser Leu Gly Ala Ile Val Leu Ile Arg Arg Tyr Asp Cys Thr Phe Asp Leu Lys Val Leu Asn Ala Gln Arg Ala Gly Phe Glu Ala Ala Ile Val His Asn Val His Ser Asp Asp Leu Val Ser Met Thr His -. Val Tyr Glu Asp Leu Arg Gly Gln Ile Ala Ile Pro Ser Val Phe Val ۰,

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Ser Glu Ala Ala Ser Gln Asp Leu Arg Val Ile Leu Gly Cys Asn Lys Ser Ala His Ala Leu Leu Leu Pro Asp Asp Pro Pro Cys His Asp Leu Gly Cys His Pro Val Leu Thr Val Ser Trp Val Leu Gly Cys Thr Leu Ala Leu Val Val Ser Ala Phe Phe Val Leu Asn His Leu Trp Leu Trp Ala Gln Ala Cys Cys Ser His Arg Arg Pro Val Lys Thr Ser Thr Cys Gln Lys Ala Gln Val Arg Thr Phe Thr Trp His Asn Asp Leu Cys Ala 230 235 Ile Cys Leu Asp Glu Tyr Glu Glu Gly Asp Gln Leu Lys Ile Leu Pro . Cys Ser His Thr Tyr His Cys Lys Cys Ile Asp Pro Trp Phe Ser Gln 260 . Ala Pro Arg Arg Ser Cys Pro Val Cys Lys Gln Ser Val Ala Ala Thr Glu Asp Ser Phe Asp Ser Thr Thr Tyr Ser Phe Arg Asp Glu Asp Pro Ser Leu Pro Gly His Arg Pro Pro Ile Trp Ala Ile Gln Val Gln Leu Arg Ser Arg Arg Leu Glu Leu Leu Gly Arg Ala Ser Pro His Cys His Cys Ser Thr Thr Ser Leu Glu Ala Glu Tyr Thr Thr Val Ser Ser Ala Pro Pro Glu Ala Pro Gly Gln .

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50 55 60 Ala Pro Leu Arg Leu Gln Asn Ala Leu His Leu Phe Lys Cys Phe Pro 65 70 75 80 Val Leu Phe Pro Leu His Lys Ile Ile Ser Phe His Pro Glu Tyr Pro 95 85 90 Trp Gln Ala Pro Ile Phe Gln Tyr Phe Tyr Leu Ser Ile Pro Ser Ser 100 105 110 Ser Leu His Pro Glu His Leu Gly His Ser Phe Val Ser Thr Leu His 115 120 125 Ser Pro Thr Arg Gln 130 <210> 1144 <211> 86 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (72) <400> 1144 Pro Cys Cys Phe His Lys Pro His Ala Ser His Ile Met Asn Phe Leu .1 . 5 10 . 15 Ile Arg Ile Gln Cys Ile Tyr Leu Pro Lys Ile Val Cys Ala Tyr Ser 20 25 30 Lys Tyr Glu Gln Phe Leu Asn Asn Gly Ser Ile Ile Phe Val Gln Asn \_ 35 \_ \_ \_ \_ 40 . 45 Ala Lys Asn Trp Gly Gln Ala Trp Trp His Thr Pro Val Ile Pro Ala 50 55 60 Leu Trp Glu Ala Lys Val Gly Xaa Ser Pro Glu Val Arg Ser Leu Arg 65 70 . 75 80 Pro Ala Trp Pro Ala Trp • . 85 • . . . <210> 1145 <211> 133 <212> PRT <213> Homo sapiens <400> 1145 Met Trp His Thr Lys Pro Leu Gly Ser Gly Ser Cys Val Pro Leu Leu ` 1 5 10 15 Pro Leu Leu Leu Leu Leu Leu Phe Pro Leu Leu Pro Trp Pro

20 25 30 Pro Pro Leu Pro Pro Pro Pro Ser Ser Leu His Pro Phe Ala Pro 35 40 45 Ala Phe Pro Ala Thr Gly Ser Leu Ser Ser Asn Asn Ser Gln Leu Leu 50 55 60 Ala Pro Leu Arg Leu Gln Asn Ala Leu His Leu Phe Lys Cys Phe Pro 65 70 . 75 80 Val Leu Phe Pro Leu His Lys Ile Ile Ser Phe His Pro Glu Tyr Pro 85 90 · 95 Trp Gln Ala Pro Ile Phe Gln Tyr Phe Tyr Leu Ser Ile Pro Ser Ser 100 105 110 Ser Leu His Pro Glu His Leu Gly His Ser Phe Val Ser Thr Leu His 115 120 125 Ser Pro Thr Arg Gln 130 -<210> 1146 <211> 99 <212> . PRT... <213> Homo sapiens <220> <221> SITE <222> (91) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1146 Met Ala Ala Leu Leu Leu Pro Leu Leu Leu Leu Leu Pro Leu Leu 5 10 15 Leu Leu Lys Leu His Leu Trp Pro Gln Leu Arg Trp Leu Pro Ala Asp 25 20 30 , Leu Ala Phe Ala Val Arg Ala Leu Cys Cys Lys Arg Ala Leu Arg Ala 35 45 · 40 Arg Ala Leu Ala Ala Ala Ala Asp Pro Glu Gly Pro Glu Gly Gly 50 . 55 . 60 Cys Ser Leu Ala Trp Arg Leu Ala Glu Leu Ala Gln Gln Arg Ala Glu 65 70 75 . 80 Leu Leu Arg Ser Arg Ala Leu Ala Thr Xaa Arg Arg Ser Ala Arg 90 85 · 95 Val Thr Gly

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	Phe	Gln 370	Tyr	Ile	Gly <sub>.</sub>	Glu	Leu 375	Cys	Arg	Tyr	Leu <sup>.</sup>	Val 380	Asn	Gln	Pro	Pro
	Ser 385	Lys	Ala	Glu	Arg	Gly 390	His	Lys	Val	Arg	Leu 395	Ala ,	Val	Gly	Ser	Gly 400
	Lėu	Arg	Ýro	Äsp	Thr 405	Trp	Glu	Arg	Phe	Val 410		Arg	Phe	Gly	Pro 415	Leu .
	Gln	Val	Leu	Glu 420	Thr	Tyr	Gİy	Leu	Thr 425	Glu	Gly	Asn	Val	Pro 430	Pro	Ser
	Thr	Thr	Gln 435	Asp	Ser	Gly	Ala	Leu 440	Trp	Gly	Val	Leu	Pro 445	Gly	Phe	Thr
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	<220	> .> SI	ጥዊ													
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275 280 285 Tyr Pro Pro Ile Thr Ile Arg Lys Glu Gln Arg Ser Asp Tyr Tyr His · 295 300 290 Val Leu Glu Ala Ala Asn Glu Gly Asp Val Arg Pro Phe Ile Arg Phe 305 310 315. 320 Ile Ala Lys Cys Thr Glu Thr Thr Leu Asp Thr Leu Leu Phe Ala Thr 325 . 330 335 Thr Glu Tyr Ser Val Ala Leu Pro Glu Ala Gln Pro Asn His Ser Gly 345 340 350 Phe Lys Glu Thr Leu Pro Val Lys Pro 355 360 . · <210> 1150 <211> 458 <212> PRT <213> Homo sapiens <400> 1150 Met Met Leu Ile Pro Met Ala Ser Val Met Ala Val Thr Glu Pro Lys 5 . 10 1 15 Trp Val Ser Val Trp Ser Arg Phe Leu Trp Val Thr Leu Leu Ser Met 20 25 30 Val Leu Gly Ser Leu Leu Ala Leu Leu Leu Pro Leu Gly Ala Val Glu 35 40 45 . Glu Gln Cys Leu Ala Val Leu Lys Gly Leu Tyr Leu Leu Arg Ser Lys 50 55 60 Pro Asp Arg Ala Gln His Ala Ala Thr Lys Cys Thr Ser Pro Ser Thr 70 65 . 75 Glu Leu Ser Ile Thr Ser Arg Gly Ala Thr Leu Leu Val Ala Lys Thr 85 · 90 95 Lys Ala Ser Pro Ala Gly Lys Leu Glu Ala Arg Ala Ala Leu Asn Gln 100 105 110 Ala Leu Glu Met Lys Arg Gln Gly Lys Arg Glu Lys Ala Gln Lys Leu 115 120 125 . Phe Met His Ala Leu Lys Met Asp Pro Asp Phe Val Asp Ala Leu Thr 135 130 140 Glu Phe Gly Ile Phe Ser Glu Glu Asp Lys Asp Ile Ile Gln Ala Asp 145 150 155 160 Tyr Leu Tyr Thr Arg Ala Leu Thr Ile Ser Pro Tyr His Glu Lys Ala 165 · 170 . 175 Leu Val Asn Arg Asp Arg Thr Leu Pro Leu Val Glu Glu Ile Asp Gln 180 185 190

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Arg Tyr Phe Ser Ile Ile Asp Ser Lys Val Lys Lys Val Met Ser Ile 200 195 Pro Lys Gly Asn Ser Ala Leu Arg Arg Val Met Glu Glu Thr Tyr Tyr 215 210 220 His His Ile Tyr His Thr Val Ala Ile Glu Gly Asn Thr Leu Thr Leu 225 230 235 240 Ser Glu Ile Arg His Ile Leu Glu Thr Arg Tyr Ala Val Pro Gly Lys 245 250 255 Ser Leu Glu Glu Gln Asn Glu Val Ile Gly Met His Ala Ala Met Lys 260 -265 270 Tyr Ile Asn Thr Thr Leu Val Ser Arg Ile Gly Ser Val Thr Ile Ser 275 280 285 Asp Val Leu Glu Ile His Arg Arg Val Leu Gly Tyr Val Asp Pro Val 295 300 290 . Glu Ala Gly Arg Phe Arg Thr Thr Gln Val Leu Val Gly His His Ile 305 · 310 315 320 Pro Pro His Pro Gln Asp Val Glu Lys Gln Met Gln Glu Phe Val Gln 325 330 335 Trp Leu Asn Ser Glu Glu Ala Met Asn Leu His Pro Val Glu Phe Ala 340 345 350 Ala Leu Ala His Tyr Lys Leu Val Tyr Ile His Pro Phe Ile Asp Gly 355 360 365 Asn Gly Arg Thr Ser Arg Leu Leu Met Asn Leu Ile Leu Met Gln Ala 370 375 380 Gly Tyr Pro Pro Ile Thr Ile Arg Lys Glu Gln Arg Ser Asp Tyr Tyr 385 390 395 400 His Val Leu Glu Ala Ala Asn Glu Gly Asp Val Arg Pro Phe Ile Arg 405 410 415 Phe Ile Ala Lys Cys Thr Glu Thr Thr Leu Asp Thr Leu Leu Phe Ala 420 · 425 430 Thr Thr Glu Tyr Ser Val Ala Leu Pro Glu Ala Gln Pro Asn His Ser 435 . 440 445 Gly Phe Lys Glu Thr Leu Pro Val Lys Pro 450 455

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\_\_\_\_\_215 210 220 Ser Leu Leu Xaa Gly Glu Pro Val Pro Ala Gly His Pro Glu Pro Xaa 225 230 235 240 Ala His Arg Gln Trp Pro Phe Gln His Ser Pro Ser Leu Pro 245 250 <210> 1155 <211> 302 <212> PRT <213> Homo sapiens <400> 1155 Met Glu Ala Thr Gly Thr Trp Ala Leu Leu Leu Ala Leu Ala Leu Leu 5 10 15 Leu Leu Leu Thr Leu Ala Leu Ser Gly Thr Arg Ala Arg Gly His Leu 20 25 30 Pro Pro Gly Pro Thr Pro Leu Pro Leu Cly Asn Leu Leu Gln Leu 45 .35 40 . . Arg Pro Gly Ala Leu Tyr Ser Gly Leu Met Arg Leu Ser Lys Lys Tyr 50 55 60 Gly Pro Val Phe Thr Ile Tyr Leu Gly Pro Trp Arg Pro Val Val Val 65 70 75 80 Leu Val Gly Gln Glu Ala Val Arg Glu Ala Leu Gly Gly Gln Ala Glu . 85 . 90 95 Glu Phe Ser Gly Arg Gly Thr Val Ala Met Leu Glu Gly Thr Phe Asp · 105 100 110 . Gly His Gly Val Phe Phe Ser Asn Gly Glu Arg Trp Arg Gln Leu Arg 115 120 125 Lys Phe Thr Met Leu Ala Leu Arg Asp Leu Gly Met Gly Lys Arg Glu 130 135 140 Gly Glu Glu Leu Ile Gln Ala Glu Ala Arg Cys Leu Val Glu Thr Phe 145 . 150 155 . 160 Gln Gly Thr Glu Gly Arg Pro Phe Asp Pro Ser Leu Leu Leu Ala Gln 165 170 175 Ala Thr Ser Asn Val Val Cys Ser Leu Leu Phe Gly Leu Arg Phe Ser . 185 180 190 Tyr Glu Asp Lys Glu Phe Gln Ala Val Val Arg Ala Ala Gly Gly Thr 195 200 · 205 Leu Leu Gly Val Ser Ser Gln Gly Gly Gln Val Ser Gly Trp Asp Pro 210 , <sup>-</sup> 220 215 Ser Pro Thr Thr Phe Pro Glu Gly Ser Cys Gln Gly Pro Met Arg Thr 225 230 235 240

Ser Cys Pro Ser Pro His Arg Pro Thr Arg Cys Ser Pro Gly Ser Cys 245 250. 255 Gly Pro Cys Gln Ala Pro Thr Ser Ser Ser Ser Thr Thr Ser Ala Pro 260 265 270 Trp Leu Pro Ser Gln Ser Gly Arg Cys Ser Ser Thr Arg Gly Thr Trp 275 • 280 285 Met Leu Arg Ala Pro His Val Thr Leu Ser Met Pro Ser Cys 290 295 300 <210> 1156 . <211> 302 <212> PRT <213> Homo sapiens <400> 1156 Met Glu Ala Thr Gly Thr Trp Ala Leu Leu Leu Ala Leu Ala Leu Leu 10 . 1 5 15 Leu Leu Thr Leu Ala Leu Ser Gly Thr Arg Ala Arg Gly His Leu 20 . 25 30 Pro Pro Gly Pro Thr Pro Leu Pro Leu Gly Asn Leu Leu Gln Leu 35 . 40 45 Arg Pro Gly Ala Leu Tyr Ser Gly Leu Met Arg Leu Ser Lys Lys Tyr . 50 55 60 Gly Pro Val Phe Thr Ile Tyr Leu Gly Pro Trp Arg Pro Val Val Val 🦈 65 70 75 80 Leu Val Gly Gln Glu Ala Val Arg Glu Ala Leu Gly Gly Gln Ala Glu 85 90 95 Glu Phe Ser Gly Arg Gly Thr Val Ala Met Leu Glu Gly Thr Phe Asp 100, 105, 110 Gly His Gly Val Phe Phe Ser Asn Gly Glu Arg Trp Arg Gln Leu Arg 115 120 125 Lys Phe Thr Met Leu Ala Leu Arg Asp Leu Gly Met Gly Lys Arg Glu 130 135 140 -Gly Glu Glu Leu Ile Gln Ala Glu Ala Arg Cys Leu Val Glu Thr Phe 150 145 155 - 160 Gln Gly Thr Glu Gly Arg Pro Phe Asp Pro Ser Leu Leu Leu Ala Gln 165 170 175 Ala Thr Ser Asn Val Val Cys Ser Leu Leu Phe Gly Leu Arg Phe Ser 180 185 190. Tyr Glu Asp Lys Glu Phe Gln Ala Val Val Arg Ala Ala Gly Gly Thr 195 · 200 205

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Ser • 225	Pro	Thr	Thr	Phe	Pro 230	Glu	Gly	Ser	Суз	Gln 235	Gly	Pro	Met	Arg	Thr 240		
Ser	Cys	Pro	Ser	Pro 245	His	Arg	Pro	Thr	Arg 250	Cys	Ser	Pro	Gly	Ser 255			
Gly	Pro	Cys	Gln 260	Ala	Pro	Thr	Ser	Ser 265	Ser	Ser	Thr	Thr	Ser 270	Ala	Pro	•	
Trp	Leu	Pro 275	Ser	Gln	Ser	Gly	Arg 280	Cys	Ser	Ser	Thr	Arg 285	Gly	Thr	Trp		
Met	Leu 290	Arg	Ala	Pro	His	Val 295	Thr.	Leu	Ser	Met	Pro 300	Ser	Cys				
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Ala	Ser	Arg 35	Gly	Leu	Ser	Leu	Phe 40	Pro	Glu	Ser	Cys	Pro 45	Asp	Phe	Суз		
Cys	Gly 50	Thr	Cys	Asp	Asp ,	Gln 55	Tyr	Cys	Cys	Ser	Asp 60	Val	Leu	Lys	Lys		
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	Ser			85					90					95		•	
	Gly		100					105					110				
	Leu	115				•	120					125	·				
	Cys 130					135					140						
145					150				-	1,55			•		160		
	Pro			165				•	170					175			-
Tyr	His	Thr	Met	Pro	Pro	Gln	Pro		Met 526	Pro	Ala	Ala	Pro	Tyr	Pro		

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180 185 190 Met Gln Tyr Pro Pro Pro Tyr Pro Ala Gln Pro Met Gly Pro Pro Ala 195 200 205 Tyr His Glu Thr Leu Ala Gly Gly Ala Ala Ala Pro Tyr Pro Ala Ser 210 215 220 Gln Pro Pro Tyr Asn Pro Ala Tyr Met Asp Ala Pro Lys Ala Ala Leu 225 . 230 235 240 • . . <210> 1158 <211> 240 <212> PRT <213> Homo sapiens . <400> 1158 Met Thr Ala Pro Val Pro Ala Pro Arg Ile Leu Leu Pro Leu Leu Leu , 1 5 10 15 Leu Leu Leu Thr Pro Pro Pro Gly Ala Arg Gly Glu Val Cys Met · 20 25 30 Ala Ser Arg Gly Leu Ser Leu Phe Pro Glu Ser Cys Pro Asp Phe Cys 35 · . 40 45 Cys Gly Thr Cys Asp Asp Gln Tyr Cys Cys Ser Asp Val Leu Lys Lys 50 55 60 . Phe Val Trp Ser Glu Glu Arg Cys Ala Val Pro Glu Ala Ser Val Pro 65 70 75 80 Ala Ser Val Glu Pro Val Glu Gln Leu Gly Ser Ala Leu Arg Phe Arg 85 90 95 Pro Gly Tyr Asn Asp Pro Met Ser Gly Phe Gly Ala Thr Leu Ala Val 100 105 110 Gly Leu Thr Ile Phe Val Leu Ser Val Val Thr Ile Ile Cys Phe 115 120 125 . . Thr Cys Ser Cys Cys Leu Tyr Lys Thr Cys Arg Arg Pro Arg Pro 140 135 130 Val Val Thr Thr Thr Thr Ser Thr Thr Val Val His Ala Pro Tyr Pro 155 160 145 150 Gln Pro Pro Ser Val Pro Pro Ser Tyr Pro Gly Pro Ser Tyr Gln Gly 165 170 175 Tyr His Thr Met Pro Pro Gln Pro Gly Met Pro Ala Ala Pro Tyr Pro . 180 185 . 190 Met Gln Tyr Pro Pro Pro Tyr Pro Ala Gln Pro Met Gly Pro Pro Ala 195 200 205

Tyr His Glu Thr Leu Ala Gly Gly Ala Ala Ala Pro Tyr Pro Ala Ser 210 215 220 Gln Pro Pro Tyr Asn Pro Ala Tyr Met Asp Ala Pro Lys Ala Ala Leu 230 225 235 240. . . <210> 1159 <211> 116 ۰. . . <212> PRT <213> Homo sapiens <400> 1159 Met Lys Gly Leu Arg Ser Leu Ala Ala Thr Thr Leu Ala Leu Phe Leu 1 5 10 . 15 Val Phe Val Phe Leu Gly Asn Ser Ser Cys Ala Pro Gln Arg Leu Leu · 30 20 . 25 Glu Arg Arg Asn Trp Thr Pro Gln Ala Met Leu Tyr Leu Lys Gly Ala 35 40 . 45 . Gln Gly Arg Arg Phe Ile Ser Asp Gln Ser Arg Arg Lys Asp Leu Ser 50 55 · 60 Asp Arg Pro Leu Pro Glu Arg Arg Ser Pro Asn Pro Gln Leu Leu Thr 65 70 75 80 Ile Pro Glu Ala Ala Thr Ile Leu Leu Ala Ser Leu Gln Lys Ser Pro · 85 90 95 Glu Asp Glu Glu Lys Asn Phe Asp Gln Thr Arg Phe Leu Glu Asp Ser 100 105 · 110 Leu Leu Asn Trp 115 • <210> 1160 <211> 116 <212> PRT <213> Homo sapiens <400> 1160 Met Lys Gly Leu Arg Ser Leu Ala Ala Thr Thr Leu Ala Leu Phe Leu · 1 - 5 10 . 15 Val Phe Val Phe Leu Gly Asn Ser Ser Cys Ala Pro Gln Arg Leu Leu · 20 25 30 Glu Arg Arg Asn Trp Thr Pro Gln Ala Met Leu Tyr Leu Lys Gly Ala 35 • 40 • 45 Gln Gly Arg Arg Phe Ile Ser Asp Gln Ser Arg Arg Lys Asp Leu Ser

WO 01/77137 PCT/US01/11988 . 50 55 60 Asp Arg Pro Leu Pro Glu Arg Arg Ser Pro Asn Pro Gln Leu Leu Thr 65 70 75 . Ile Pro Glu Ala Ala Thr Ile Leu Leu Ala Ser Leu Gln Lys Ser Pro . 85 . 90 95 Glu Asp Glu Glu Lys Asn Phe Asp Gln Thr Arg Phe Leu Glu Asp Ser 100 105 110 Leu Leu Asn Trp . 115 <210> 1161 <211> 426 <212> PRT <213> Homo sapiens <400> 1161 Val Val Pro Phe Ser Gly Met Leu Pro Pro Gly Ala Glu Lys Ala Val 1 .-5 10 15 Ala Ser Phe Val Thr Gln Leu Ala Ala Ala Glu Ala Leu Gln Lys Ala 20 25 30 Pro Asp Val Thr Thr Leu Pro Arg Asn Val Met Phe Val Phe Gln 35 40 45 Gly Glu Thr Phe Asp Tyr Ile Gly Ser Ser Arg Met Val Tyr Asp Met 50 55 60 Glu Lys Gly Lys Phe Pro Val Gln Leu Glu Asn Val Asp Ser Phe Val 65 70 75 80 Glu Leu Gly Gln Val Ala Leu Arg Thr Ser Leu Glu Leu Trp Met His 85 90 95 Thr Asp Pro Val Ser Gln Lys Asn Glu Ser Val Arg Asn Gln Val Glu 100 105 110 Asp Leu Leu Ala Thr Leu Glu Lys Ser Gly Ala Gly Val Pro Ala Val . 115 · 120 125 Ile Leu Arg Arg Pro Asn Gin Ser Gln Pro Leu Pro Pro Ser Ser Leu 130 135 140 . Gln Arg Phe Leu Arg Ala Arg Asn Ile Ser Gly Val Val Leu Ala Asp 150 145 155 160 His Ser Gly Ala Phe His Asn Lys Tyr Tyr Gln Ser Ile Tyr Asp Thr 165 170 175 Ala Glu Asn Ile Asn Val Ser Tyr Pro Glu Trp Leu Ser Pro Glu Glu 180 185 190 Asp Leu Asn Phe Val Thr Asp Thr Ala Lys Ala Leu Ala Asp Val Ala . 195 200 205

<210> 1162

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Thr Val Leu Gly Arg Ala Leu Tyr Glu Leu Ala Gly Gly Thr Asn Phe \_ 215 210 220 Ser Asp Thr Val Gln Ala Asp Pro Gln Thr Val Thr Arg Leu Leu Tyr 230 235 . ' 240 225 Gly Phe Leu Ile Lys Ala Asn Asn Ser Trp Phe Gln Ser Ile Leu Arg 250 245 255 Gln Asp Leu Arg Ser Tyr Leu Gly Asp Gly Pro Leu Gln His Tyr Ile 260 . · 265 ·270 Ala Val Ser Ser Pro Thr Asn Thr Thr Tyr Val Val Gln Tyr Ala Leu 285 275 280 Ala Asn Leu Thr Gly Thr Val Val Asn Leu Thr Arg Glu Gln Cys Gln 290 295 300 Asp Pro Ser Lys Val Pro Ser Glu Asn Lys Asp Leu Tyr Glu Tyr Ser 305 310 315. 320 Trp Val Gln Gly Pro Leu His Ser Asn Glu Thr Asp Arg Leu Pro Arg 325 - 330 335 Cys Val Arg Ser Thr Ala Arg Leu Ala Arg Ala Leu Ser Pro Ala Phe 350 340 345 Glu Leu Ser Gln Trp Ser Ser Thr Glu Tyr Ser Thr Trp Thr Glu Ser 360 365 -355 • Arg Trp Lys Asp Ile Arg Ala Arg Ile Phe Leu Ile Ala Ser Lys Glu 370 375 . 380 • Leu Glu Leu Ile Thr Leu Thr Val Gly Phe Gly Ile Leu Ile Phe Ser 390 . 395 400 385 Leu Ile Val Thr Tyr Cys Ile Asn Ala Lys Ala Asp Val Leu Phe Ile 405 410 415 . Ala Pro Arg Glu Pro Gly Ala Val Ser Tyr 420 425 . .

<211> 417
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<213> Homo sapiens
<400> 1162
Met Ala Thr Ala Gly Gly Gly Ser Gly Ala Asp Pro Gly Ser Arg Gly
1 5 10 15
Leu Leu Arg Leu Leu Ser Phe Cys Val Leu Leu Ala Gly Leu Cys Arg
20 25 30
Gly Asn Ser Val Glu Arg Lys Ile Tyr Ile Pro Leu Asn Lys Thr Ala
35 40 45

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	Pro	Cys 50	Val	Arg	Leu	Leu	Asn 55	Ala	Thr	His	Gln	Ile 60	Gly	Cys	Gln	Ser		
	Ser 65	Ile	Ser	Gly	Asp	Thr 70	Gly	Val	Ile	His	Val 75	Val	Glu	Lys	Glu	Glu 80		
	Asp	Leu	Gln	Trp	Val 85	Leu	Thr	Asp	Gly	Pro 90	Asn	Pro	Pro	Tyr	Met 95	Val		
	Leu	Leu	Glu	Ser 100	Lys	His	Phe	Thr	Arg 105	Asp	Leu	Met	Glu	Lys 110	Leu	Lys		
	Gly	Arg	Thr 115	Ser	Arg	Ile	Ala	Gly 120	Leu	Ala	Val	Ser	Leu 125	Thr	Lys	Pro		
	Ser	Pro 130	Ala	Ser	Gly	Phe	Ser 135	Pro	Ser	Val	Gln	Çys 140	Pro	Asn	Asp	Gly		
	Phe 145	Gly	Val	Tyr	Ser	Asn 150	Ser	Tyr	Gly	Pro	Glu 155	Phe	Ala	His	Cys	Arg 160 <sub>.</sub>		
	Glu	Ile	Gln	Trp	Asn 165	Ser	Leu	Gly	Asņ	Gly 170	Leu	Ala	Tyr	Glu	Asp 175			
	Ser	Phe	Pro	Ile 180	Phe	Leu	Leu	Glu	Asp 185	Glu	Asņ	Glų	Thr	Lys 190	Val	Ile	•	
	Lys	Gln	Cys 195	Tyr	Gln	Asp	His	Asn 200	Leu	Ser	Gln	Asn	Gly 205	Ser	Ala	Pro		
	Thr	Phe 210	Pro	Leu	Cys	Ala	Met 215	Gln	Leu	Phe	Ser	His 220	Met	His	Ala	Val		
	Ile 225	Ser	Thr	Ala	Thr	Cys 230	Met	Arg	Arg	Ser	Ser 235	Ile	Gln	Ser	Thr	Phe 240		
	Ser	Ile	Asn	Pro	Glu 245	Ile	Val	Cys	Asp	<b>Pro</b> 250	Leu	Ser	Asp	Tyr	Asn 255	Val		
	Trp	Ser	Met	Leu 260	Lys	Pro	Ile	Asn	Thr 265	Thr	Gly '	Thŕ	Leu	Lys 270	Pro	Asp		
•	Asp	Arg	Val 275	Val	Val	Ala	Ala	Thr 280	Arg	Leu	Asp	Ser	Arg 285	Ser	Phe	Phe		
	Trp	Asn 290		Ala	Pro	Gly	Ala 295.		Ser	Ala	Val	Ala 300	Ser	Phe	Val	Thr		
	Gln. 305	Leu	Ala	Ala	Ala	Glu 310	Ala	Leu	Gln	Lys	Ala 315	Pro	Asp	Val	Thr	Thr 320		•
	Leu	Pro	Arg	Asn	Val 325	Met	Phe	Val	Phe	Phe 330	Gln	Gly	Glu	Thr	Phe 335	Asp		
	Tyr	Ile	Gly	Ser 340	Ser	Arg	Met	Val	Tyr 345	Asp	Met	Glu	Lys :	Gly 350	Lys	Phe		
	Pro	Val	Gln 355	Leu	Glu	Asn	.Val	Asp 360	Ser	Phe	Val		Leu 365	Gly	Gln	Val		

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Ala Leu Arg Thr Ser Leu Glu Leu Trp Met His Thr Asp Pro Val Ser 370 375 380 · · Gln Lys Asn Glu Ser Val Arg Asn Gln Val Glu Asp Leu Leu Ala Thr . 390 385 395 400 Leu Glu Thr Val Ser Tyr Ala His Leu Asn Leu Gln Gly Gly Glu Val 405 410 415 Leu <210> 1163 <211> 709 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (216) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1163 Met Ala Thr Ala Gly Gly Gly Ser Gly Ala Asp Pro Gly Ser Arg Gly 5 · 1 · . 10 15 Leu Leu Arg Leu Leu Ser Phe Cys Val Leu Leu Ala Gly Leu Cys Arg 20 25 . 30 Gly Asn Ser Val Glu Arg Lys Ile Tyr Ile Pro Leu Asn Lys Thr Ala 35 40 45 Pro Cys Val Arg Leu Leu Asn Ala Thr His Gln Ile Gly Cys Gln Ser 55 60 Ser Ile Ser Gly Asp Thr Gly Val Ile His Val Val Glu Lys Glu Glu 65 . 70 75 80 Asp Leu Gln Trp Val Leu Thr Asp Gly Pro Asn Pro Pro Tyr Met Val · . 85 90 95 Leu Leu Glu Ser Lys His Phe Thr Arg Asp Leu Met Glu Lys Leu Lys 100 105 110 Gly Arg Thr Ser Arg Ile Ala Gly Leu Ala Val Ser Leu Thr Lys Pro 115 120 • 125 Ser Pro Ala Ser Gly Phe Ser Pro Ser Val Gln Cys Pro Asn Asp Gly 130 . 135 140 Phe Gly Val Tyr Ser Asn Ser Tyr Gly Pro Glu Phe Ala His Cys Arg 145 150 155 160 Glu Ile Gln Trp Asn Ser Leu Gly Asn Gly Leu Ala Tyr Glu Asp Phe 165 170 175 Ser Phe Pro Ile Phe Leu Leu Glu Asp Glu Asn Glu Thr Lys Val Ile 180 · 185 . . 190

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Ŀγs	Gİn	Cys 195	Tyr	Gln	Asp	His	Asn 200	Leu	Ser	Gln	Asn	Gly 205	Ser	Ala	Pro	
Ser	Phe 210	Pro	Leu	Cys	Ala	Met 215	Xaa	Leu	Phe	Ser	His 220		His	Ala	Val	
Ile 225	Ser	Thr	Ala	Thr	Cys 230	Met	Arg	Arg	Ser	Ser 235	Ile	Gln	Ser	Thr	Phe 240	
Ser	Ile	Asn	Pro	Glu 245	Ile	Val	Cys		Pro 250	Leu	Ser	Asp	Tyr	Asn 255	Val	
Trp	Ser	Met	Leu 260	Lys	Pro	Ile	Asn	Thr 265	Thr	Gly	Thr	Leu	Lys 270	Pro	Asp	
Asp	Arg	Val 275	Val	Val	Ala	Ala	Thr 280	Arg	Leu	Asp	Ser	Arg 285	Ser	Phe	`Phe	
Trp	Asn 290	Val	Ala	Pro	Gly	Ala 295	Glu	Ser	Ala	Val	Ala 300		Phe	Val	Thr	
Gln 305	Leu	Ala	Ala	Ala	Glu 310	Ala	Leu	Gln	Lys	Ala 315	Pro	Asp	Val	Thr	Thr 320	
Leu	Pro	Arg	Asn	Val 325	Met	'Phe	Val	Phe	Phe 330	Gln	Gly	Glu	Thr	Phe 335	Asp	
Tyr	Ile	Gly	Ser 340	Ser	Arg	Met	Val	Tyr 345	Asp	Met	Glu	Lys	Gly 350		Phe	
Pro	Val	Gln 355	Leu	Glu	Asn	Val	Asp 360	Ser	Phe	Val.	Glu	Leu 365	Gly	Gln	Val	
Ala	Leu 370	Arg	Thr	Ser	Leu	Glu 375	Leu	Trp	Met	His	Thr 380	Ąsp	Pro	Val	Ser	
Gln 385	Lys	Asn	Glu ,	Ser	Val 390	Arg	Asn	Gln	Val	Glu 395	Asp	Leu	Leu	Ala	Thr 400	•
Leu	Glu	Lys	Ser	Gly 405	Ala	Gly	Val	Pro	Ala 410	Val	Ile	Leu	Arg	Arg 415	Pro	
Asn	Gln	Ser	Gln 420		Leu	Pro	Pro	Ser 425	Ser	Leu	Gln	Arg	Phe 430	Leu	Arg	
Ala	Arg	Asn 435		Ser	Gly	Val	Val 440		Ala	Asp	His	Ser 445	Gly	Ala	Phe	
His	Asn 450		Tyr	Tyr		Ser 455		Tyr	Asp	Thr	Ala 460		Asn	Ile	Asn	
Val 465	Ser	, Tyr	Pro	Glu	Trp 470		Ser	Pro	Glu	Glu 475	Asp	Leu	Asn	Phe	Val 480	
Thr	Asp	Thr	Ala	Lys 485		Leu	Ala	Asp	Val 490		Thr	Val	Leu	Gly 495	Arg	
Ala	Leu	. Tyr	Glu 500		Ala	Gly	Gly	505		Phe	Ser	Asp	Thr 510		Gln	
									633							

Ala Asp Pro Gln Thr Val Thr Arg Leu Leu Tyr Gly Phe Leu Ile Lys 515 520 525 Ala Asn Asn Ser Trp Phe Gln Ser Ile Leu Arg Gln Asp Leu Arg Ser 540 530 535 Tyr Leu Gly Asp Gly Pro Leu Gln His Tyr Ile Ala Val Ser Ser Pro 545 550 555 560 Thr Asn Thr Thr Tyr Val Val Gln Tyr Ala Leu Ala Asn Leu Thr Gly 565 570 575 Thr Val Val Asn Leu Thr Arg Glu Gln Cys Gln Asp Pro Ser Lys Val 580 585 590 Pro Ser Glu Asn Lys Asp Leu Tyr Glu Tyr Ser Trp Val Gln Gly Pro 595 600 605 Leu His Ser Asn Glu Thr Asp Arg Leu Pro Arg Cys Val Arg Ser Thr 610 615 . 620 . Ala Arg Leu Ala Arg Ala Leu Ser Pro Ala Phe Glu Leu Ser Gln Trp 625 , 630 635 640 Ser Ser Thr Glu Tyr Ser Thr Trp Thr Glu Ser Arg Trp Lys Asp Ile 645 650 655 . Arg Ala Arg Ile Phe Leu Ile Ala Ser Lys Glu Leu Glu Leu Ile Thr 660 665 670 . Leu Thr Val Gly Phe Gly Ile Leu Ile Phe Ser Leu Ile Val Thr Tyr 675 680 685 Cys Ile Asn Ala Lys Ala Asp Val Leu Phe Ile Ala Pro Arg Glu Pro 690 695 . 700 . Gly Ala Val Ser Tyr 705 -<210> 1164 <211> 230 <212> PRT <213> Homo sapiens <400> 1164 ۰. Met Thr Gly Leu Tyr Glu Leu Val Trp Arg Val Leu His Ala Leu Leu 1 5 10 15 Cys Leu His Arg Thr Leu Thr Ser Trp Leu Arg Val Arg Phe Gly Thr • • 20 25 30 Trp Asn Trp Ile Trp Arg Arg Cys Cys Arg Ala Ala Ser Ala Ala Val 35 40 45 · Leu Ala Pro Leu Gly Phe Thr Leu Arg Lys Pro Pro Ala Val Gly Arg 50 . 55 60

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Asn Arg Arg His His Arg His Pro Arg Gly Gly Ser Cys Leu Ala Ala Ala His His Arg Met Arg Trp Arg Ala Asp Gly Arg ,Ser Leu Glu Lys · · · - 85 Leu Pro Val His Met Gly Leu Val Ile Thr Glu Val Glu Gln Glu Pro Ser Phe Ser Asp Ile Ala Ser Leu Val Val Trp Cys Met Ala Val Gly Ile Ser Tyr Ile Ser Val Tyr Asp His Gln Gly Ile Phe Lys Arg Asn Asn Ser Arg Leu Met Asp Glu Ile Leu Lys Gln Gln Gln Glu Leu Leu Gly Leu Asp Cys Ser Lys Tyr Ser Pro Glu Phe'Ala Asn Ser Asn Asp Lys Asp Asp Gln Val Leu Asn Cys His Leu Ala Val Lys Val Leu Ser Ala Gly Arg Trp Lys Ser Arg Tyr Cys Lys Ser Cys Ser Gly Leu Leu 195 . . Pro Val Ser Ser Pro Glu Ala Lys Glu Thr His Arg Phe Gly Cys Arg Tyr Val Ser Gln Phe Thr <210> 1165 <211> 293 <212> PRT <213> Homo sapiens <400> 1165 Met Thr Gly Leu Tyr Glu Leu Val Trp Arg Val Leu His Ala Leu Leu Cys Leu His Arg Thr Leu Thr Ser Trp Leu Arg Val Arg Phe Gly Thr Trp Asn Trp Ile Trp Arg Arg Cys Cys Arg Ala Ala Ser Ala Ala Val Leu Ala Pro Leu Gly Phe Thr Leu Arg Lys Pro Pro Ala Val Gly Arg Asn Arg Arg His His Arg His Pro Arg Gly Gly Ser Cys Leu Ala Ala . 70 Ala His His Arg Met Arg Trp Arg Ala Asp Gly Arg Ser Leu Glu Lys Leu Pro Val His Met Gly Leu Val Ile Thr Glu Val Glu Gln Glu Pro . . . . . . .

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				100					105					110			
	Ser	Phe	Ser 115		Ile	Ala	Ser	Leu 120	Val	Val	Trp	Cys	Met 125	Ala	Val	Gly	
	Ile	Ser 130	Tyr	Ile	Ser	Val	Tyr 135	Asp	His	Gln	Gly	Ile 140	Phe	Lys	Arg	Asn	
	Asn 145	Ser	Arg	Leu	Met	Asp 150	Glu	Ile	Leu	Lys	Gln 155	Gln	Gln	Glu	Leu	Leu 160	
	Gly	Leu	Asp	Cys	Ser 165	Lys	Tyr	Ser	Pro	Glu 170	Phe	Ala	Asn	Ser	Asn 175	Asp	
	Lys	Asp	Asp	Gln 180	Val	Leu	Asn	Cys	His 185	Leu	Ala	Val	Lys	Val 190	Leu	Ser	
	Pro	Glu	Asp 195	Gly	Lys	Ala	Asp	Ile 200	Val	Arg	Ala	Ala	Gln 205	Asp	Phe	Cys	
	Gln	Leu 210	Val	Ala	Gln	Lys	Gln 215	Lys	Arg	Pro	Thr	Asp 220	Leu	Asp	Val	Asp	•
	Thr 225	Leu	Ala	Ser	Leu	Leu 230	Ser	Ser	Asn	Gly	Cys 235	Pro	Asp	Pro	Asp	Leu 240	
	Val	Leu	Lys	Phe	Gly 245	Pro	Val	Asp	Ser		Leu					Trp	•
· ·	His	Ile	Arg	Leu 260	Thr	Glu	Ile	Val	Ser 265	Leu	Pro	Ser	His	Leu 270	Asn	Ile	
	Ser	Tyr	Glu 275	Asp	Phe	Phe	Ser	Ala 280	Leu	Arg	Gln	Tyr	Ala 285	Ala	Cys	Glu	
	Gln	Arg 290	Leu	Gly	Lys												
	<213 <213	0> 11 1> 17 2> PF 3> Ho	73 RT	sapie	ens												
•		l> SI															
		2> (8 3> <sub>.</sub> Xa		quals	s any	of	the	natu	rall	.y ∙oc	curr	ing	L-an	uino	acic	s	
	<222	)> L> SI 2> (1 3> Xa	.28)	nals	s any	r of	the	natu	rall	.у ос	curr	ing	L-an	uino	ació	s	
	<222	L> SI 2> (1	46)	uals	s any	, of	the	natu	urall	V OC	curr	ina	L-an	ino	ació	Ś	

<223> Xaa equals any of the naturally occurring L-amino acids.

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<222> (146)

<220> <221> SITE <222> (160) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (168) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (172) <223> Xaa equals any of the naturally occurring L-amino acids · . <400> 1166 Met Val Glu Glu Pro Gly Arg Phe Leu Pro Leu Trp Leu His Ile Leu 5 1 10 - 15 Leu Ile Thr Val Leu Leu Val Leu Ser Gly Ile Phe Ser Gly Leu Asn 20 , 25 . 30 Leu Gly Leu Met Ala Leu Asp Pro Met Glu Leu Arg Ile Val Gln Asn 35 40 45 Cys Gly Thr Glu Lys Glu Arg Arg Tyr Ala Arg Lys Ile Glu Pro Ile 55 60 50 Arg Arg Lys Gly Asn Tyr Leu Leu Cys Ser Leu Leu Leu Gly Asn Val 65 70 75 80 Leu Val Asn Thr Xaa Leu Thr Ile Leu Leu Asp Asn Leu Ile Gly Ser 85 95 90 Gly Leu Met Ala Val Ala Ser Ser Thr Ile Gly Ile Val Ile Phe Gly 100 105 110 Glu Ile Leu Pro Gln Ala Leu Cys Ser Arg His Gly Leu Ala Val Xaa · 115 120 125 . Ala Asn Thr Ile Leu Leu Thr Lys Phe Phe Met Leu Leu Thr Phe Pro 130 135 140 Leu Xaa Phe Pro Ile Ser Lys Leu Leu Asp Phe Phe Leu Gly Gln Xaa 145 · 150 155 160 Ile Arg Thr Val Tyr Asn Arg Xaa Lys Leu Met Xaa Met • . 165 170 <210> 1167 <211> 173 <212> PRT <213> Homo sapiens <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE <222> (160) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (168) <223> Xaa equals any of the naturally occurring L-amino acids . ' <220> <221> SITE <222> (172) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1167 Met Val Glu Glu Pro Gly Arg Phe Leu Pro Leu Trp Leu His Ile Leu 1 5 10 15 Leu Ile Thr Val Leu Leu Val Leu Ser Gly Ile Phe Ser Gly Leu Asn 20 25 30 Leu Gly Leu Met Ala Leu Asp Pro Met Glu Leu Arg Ile Val Gln Asn 45 Cys Gly Thr Glu Lys Glu Arg Arg Tyr Ala Arg Lys Ile Glu Pro Ile 55 50 60 Arg Arg Lys Gly Asn Tyr Leu Leu Cys Ser Leu Leu Leu Gly Asn Val 65 70 75 80 Leu Val Asn Thr Ser Leu Thr Ile Leu Leu Asp Asn Leu Ile Gly Ser . 85 . 90 . 95 Gly Leu Met Ala Val Ala Ser Ser Thr Ile Gly Ile Val Ile Phe Gly • 100 105 . 110 Glu Ile Leu Pro Gln Ala Leu Cys Ser Arg His Gly Leu Ala Val Gly 115 120 125 Ala Asn Thr Ile Leu Leu Thr Lys Phe Phe Met Leu Leu Thr Phe Pro • 135 · 130 140 Leu Xaa Phe Pro Ile Ser Lys Leu Leu Asp Phe Phe Leu Gly Gln Xaa 145 150 155 . 160 Ile Arg Thr Val Tyr Asn Arg Xaa Lys Leu Met Xaa Met 165 170

<210> 1168 <211> 314 <212> PRT <213> Homo sapiens <220>

<221> SITE <222> (93)

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Leu His Lys Ala Ser His Glu Asn Ala Ile 305 310

<210> 1169 <211> 604 <212> PRT <213> Homo sapiens <400> 1169 Met Val Glu Glu Pro Gly Arg Phe Leu Pro Leu Trp Leu His Ile Leu 1 5 1.0 15 Leu Ile Thr Val Leu Leu Val Leu Ser Gly Ile Phe Ser Gly Leu Asn 20 25 30 Leu Gly Leu Met Ala Leu Asp Pro Met Glu Leu Arg Ile Val Gln Asn 35 ·40 45 . Cys Gly Thr Glu Lys Glu Arg Arg Tyr Ala Arg Lys Ile Glu Pro Ile 50 55 60 Arg Arg Lys Gly Asn Tyr Leu Leu Cys Ser Leu Leu Leu Gly Asn Val 75 80 65 70 Leu Val Asn Thr Ser Leu Thr Ile Leu Leu Asp Asn Leu Ile Gly Ser Gly Leu Met Ala Val Ala Ser Ser Thr Ile Gly Ile Val Ile Phe Gly 100 105 110 Glu Ile Leu Pro Gln Ala Leu Cys Ser Arg His Gly Leu Ala Val Gly 115 120 125 Ala Asn Thr Ile Leu Leu Thr Lys Phe Phe Met Leu Leu Thr Phe Pro 130 135 140 Leu Ser Phe Pro Ile Ser Lys Leu Leu Asp Phe Phe Leu Gly Gln Glu 145 150 155 160 4 Ile Arg Thr Val Tyr Asn Arg Glu Lys Leu Met Glu Met Leu Lys Val . 165 170 175 Thr Glu Pro Tyr Asn Asp Leu Val Lys Glu Glu Leu Asn Met Ile Gln 180 185 190 . Gly Ala Leu Glu Leu Arg Thr Lys Thr Val Glu Asp Ile Met Thr Gln 195 200 205 Leu Gln Asp Cys Phe Met Ile Arg Ser Asp Ala Ile Leu Asp Phe Asn . 210 215 220 Thr Met Ser Glu Ile Met Glu Ser Gly Tyr Thr Arg Ile Pro Val Phe 225 230 235 240 Glu Asp Glu Gln Ser Asn Ile Val Asp Ile Leu Tyr Val Lys Asp Leu 245 250 255 Ala Phe Val Asp Pro Asp Asp Cys Thr Pro Leu Lys Thr Ile Thr Arg

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				260					265					270			
.1	Phe	Tyr	Asn 275	His	Pro	Val	His	Phe 280	Val	Phe	His	Asp	Thr 285	Lys	Leu	Asp	
7	lla	Met 290	Leu	Glu	Glu	Phe	Lys 295	Lys	Gly	Lys	Ser	His 300	Leu	Ala	Ile	Val	
	Gln 305	Lys	Val	Asn	Asn	Glu 310	Gly	Ģlu	Gly	Asp	Pro 315	Phe	Tyr	Glu	Val	Leu 320	
G	ly	Leu	Val	Thr	Leu 325	Glu	Asp	Val	Ile	Glu 330	Glu	Ile	Ile	Lys	Ser 335	Glu	•
נ	le	Leu	Asp	Glu 340	Ser	Asp	Met	Tyr	Thr 345	Asp	Asn	Arg	Ser	Arg 350	Lys	Arg	
V	/al	Ser	Glu 355	Lys	Asn	Lys	Arg	Asp 360	Phe	Ser	Ala	Phe	Lys 365	Asp	Ala	Asp	
P	Asn	Glu 370	Leu	Lys	Val	Lys	Ile 375	Ser	Pro	Gln.	Leu	Leu 380	Leu	Ala	Ala	His	
	rg 185	Phe	Leu	Ala	Thr	Glu 390	Val	Ser	Gln	Phe	Ser 395	Pro	Ser	Leu	Ile	Ser 400	
	lu 	Lys	Ile	Leu	Leu 405	Arg	Leu		Lys	Tyr 410	Pro	Asp	Val	Ile	Gln 415	Glu	
I	ieu	Lys	Phe	Asp 420	Glu	His	Asn	Lys	Tyr 425	Tyr	Ala	Arg	His	Tyr 430	Leu	Туr	
			435		Pro			440	•				445		-	-	
		450		•	Ala		455				-	460					
4	.65				Gly	470					475					480	
					Pro 485					490					495	-	
				500	Asp		•		505					510			
			515		Ser			520			•		525				
		530			Val		535				. <i>•</i>	540					
. 5	45		•		Leu	550					555					560	
				•	Cys 565					57Q					575		
G	lu	Leu	Pro	Val	Val	Asp	Glu	Thr	Thr	Thr	Leu	Leu	Asn	Glu	Arg	Asn	

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580 585 590 · . Ser Leu Leu His Lys Ala Ser His Glu Asn Ala Ile 595 600 <210> 1170 <211> 189 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (169) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (172) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (180) <223> Xaa equals any of the naturally occurring L-amino acids . <400> 1170 Met Ala Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu 5 10 15 1 Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala 20 25 . 30 . Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala 35 40 45 Cys Gly Thr Val Gly Leu Leu Glu His Ser Phe Glu Ile Asp Asp 50 55 60 Ser Ala Asn Phe Arg Lys Arg Gly Ser Leu Leu Trp Asn Gln Gln Asp 65 70 75 80 Gly Thr Leu Ser Leu Ser Gln Arg Gln Leu Ser Glu Glu Glu Arg Gly 85 90 95 Arg Leu Arg Asp Val Ala Ala Leu Asn Gly Leu Tyr Arg Val Arg Ile 100 105 110 Pro Arg Arg Pro Gly Ala Leu Asp Gly Leu Glu Ala Gly Gly Tyr Val 115 120 125 Ser Ser Phe Val Pro Ala Cys Ser Leu Val Glu Ser His Leu Ser Asp 130 135 140 Gln Leu Thr Leu His Val Asp Val Ala Gly Asn Val Val Gly Val Ser 145 150. 155 160 Val Val Thr His Pro Met Ala Pro Xaa Ser Pro Xaa Gly Phe Pro Leu 165 170 175 .

642

Pro Trp Ser Xaa Ala Glu Ile Leu Ala Thr Ile Gln Phe 180 185 <210> 1171 <211> 117 <212> PRT <213> Homo sapiens <400> 1171 Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu Met Ala 5 10 15 Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala Gly Thr 20 25 30 Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala Cys Gly 35 40 45 Thr Val Gly Leu Leu Leu Glu His Ser Phe Glu Ile Leu Ala Thr Met 50 55 60 Pro Val Leu Thr Ser His Pro Pro Thr Pro Ser Pro Cys Ser Leu Gly 65 70 75 80 Thr Cys Arg Leu Leu Ser Ser Leu Cys Ala Phe Val Pro Gly Gly Leu 85 90 95 Thr Leu Leu Ser Leu Ala Gly Leu Gly Gly Pro Val Gln Ala Pro Ala 100 105 110 Ala Pro Pro Ser Leu · 115 <210> 1172 <211> 241 ۰. <212> PRT <213> Homo sapiens <400> 1172 Met Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu 5 10 15 Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala 20 25 30 Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala 35 . 40 45 Cys Gly Thr Val Gly Leu Leu Leu Glu His Ser Phe Glu Ile Asp Asp 50 55 <sub>.</sub> 60 Ser Ala Asn. Phe Arg Lys Arg Gly Ser Leu Leu Trp Asn Gln Gln Asp 70 . 75 80 65 . .

Gly Thr Leu Ser Leu Ser Gln Arg Gln Leu Ser Glu Glu Glu Arg Gly

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	85	90	95
Arg Leu Arg Asp V	al Ala Ala I	Leu Asn Gly Leu Ty	r Arg Val Arg Ile
100		105	110
Pro Arg Arg Pro G		Asp Gly Leu Glu A	a Gly Gly Tyr Val
115		120	125
Ser Ser Phe Val P	ro Ala Cys 3	Ser Leu Val Glu Se	er His Leu Ser Asp
130	135	14	10
Gln Leu Thr Leu H	is Val Asp \	Val Ala Gly Asn Va	l Val Gly Val Ser
145	·150	155	160
Val Val Thr His P	ro Met Ala 1	Pro Cys Ser Pro A	g Gly Phe Pro Pro
1	65	170	175
Ala His Gly Val G	lu Pro Glu I	Ile Leu Ala Thr Me	et Pro Val Leu Thr
180		185	190
Ser His Pro Pro T		Pro Cys Ser Leu GJ	y Thr Cys Arg Leu
195		200	205
Leu Ser Ser Leu C	ys Ala Phe V	Val Pro Gly Gly Le	
210	215	22	
Leu Ala Gly Leu G	ly Gly Pro N	Val Gln Ala Pro Al	a Ala Pro Pro Ser
225	230	235	240
Leu			
· ·			
<210> 1173 <211> 265 <212> PRT <213> Homo sapient	s		
<220>			
<221> SITE <222> (215)			· •
<223> Xaa equals	any of the r	naturally occurrin	g L-amino acids
<400> 1173			
Met Phe Leu Leu P	he Leu Leu 7	Thr Cys Glu Leu Al	a Ala Glu Val Ala
1	5	10	15
Ala Glu Val Glu L	ys Ser Ser A	Asp Gly Pro Gly Al	a Ala Gln Glu Pro
20		25	30
Thr Trp Leu Thr A	sp Val Pro A	Ala Ala Met Glu Pi	e Ile Ala Ala Thr
35		40	45
Glu Val Ala Val I	le Gly Phe I		u Ile Pro Ala Val
50	55		0
Pro Ile Leu His S	er Met Val (	Gln Lys Phe Pro G	y Val Ser Phe Gly
65	70	75	80

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Ile Ser Thr Asp Ser Glu Val Leu Thr His Tyr Asn Ile Thr Gly Asn Thr Ile Cys Leu Phe Arg Leu Val Asp Asn Glu Gln Leu Asn Leu Glu Asp Glu Asp Ile Glu Ser Ile Asp Ala Thr Lys Leu Ser Arg Phe Ile 120 · Glu Ile Asn Ser Leu His Met Val Thr Glu Tyr Asn Pro Val Thr Val Ile Gly Leu Phe Asn Ser Val Ile Gln Ile His Leu Leu Leu Ile Met 150<sup>.</sup> . 160 Asn Lys Ala Ser Pro Glu Tyr Glu Glu Asn Met His Arg Tyr Gln Lys Ala Ala Lys Leu Phe Gln Gly Lys Ile Leu Phe Ile Leu Val Asp Ser Gly Met Lys Glu Asn Gly Lys Val Ile Ser Phe Phe Lys Leu Lys Glu <sup>·</sup> 205 Ser Gln Leu Pro Ala Leu Xaa Ile Tyr Gln Thr Leu Asp Asp Glu Trp Asp Thr Leu Pro Thr Ala Glu Val Ser Val Glu His Val Gln Asn Phe . Cys Asp Gly Phe Leu Ser Gly Lys Leu Leu Lys Glu Asn Arg Glu Ser . 245 Glu Gly Lys Thr Pro Lys Val Glu Leu <210> 1174 <211> 265 <212> PRT <213> Homo sapiens <400> 1174 Met Phe Leu Leu Phe Leu Leu Thr Cys Glu Leu Ala Ala Glu Val Ala • Ala Glu Val Glu Lys Ser Ser Asp Gly Pro Gly Ala Ala Gln Glu Pro Thr Trp Leu Thr Asp Val Pro Ala Ala Met Glu Phe Ile Ala Ala Thr Glu Val Ala Val Ile Gly Phe Phe Gln Asp Leu Glu Ile Pro Ala Val Pro Ile Leu His Ser Met Val Gln Lys Phe Pro Gly Val Ser Phe Gly Ile Ser Thr Asp Ser Glu Val Leu Thr His Tyr Asn Ile Thr Gly Asn

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•		85					90					95				
Thr Ile C	ys Leu 100	Phe	Arg	Leu	Val	Asp 105	Asn	Glu	Gln	Leu	Asn 110	Leu	Glu			• .
Asp Glu A 1	sp Ile 15	Glu	Ser	Ile	Asp 120	Ala	Thr	Lys	Leu	Ser 125	Arg	Phe	Ile <sup>.</sup>			
Glu Ile A 130	sn Ser	Leu	His	Met 135	Val	Thr	Glu	Tyr	Asn 140	Pro	Val	Thr	Val			
Ile Gly L 145	eu Phe	Asn	Ser 150	Val	Ile	Gln	Ile	His 155	Leu	Leu	Leu	Ile	Met 160			
Asn Lys A	la Ser	Pro 165	Glu	Tyr	Glu	Glu	Asn 170	Met	His	Arg	Tyr	Gln 175	Lys	•		
Ala Ala L	ys Leu 180	Phe	Gln	Ġly	Lys	Ile 185	Leu	Phe	Ile	Leu	Val 190	Asp	Ser	•*	-	
Gly Met L	ys Glu 95	Asn	Gly	Lys	Val 200	Ile	Ser	Phe	Phe	Lys 205	Leu	Lys	Glu	-		
Ser Gln L 210	eu Pro	Ala	Leu	Ala 215	Ile	Tyr	Gln	Thr	Leu 220	Asp	Asp	Glu	Trp			
Asp Thr L 225	eu <sub>.</sub> Pro		Ala 230		Val	Ser	Val	Glu 235	His	Val	Gln	Asn	Phe 240			
Cys Asp G	ly Phe	Leu 245	Ser	Gly	Lys	Leu	Leu 250	Lys		Asn	Arg	Glu 255	Ser	•		
Glu Gly L	ys Thr 260	Pro	Lys	Val	Glu	Leu 265		•							•	
<210> 117 <211> 158 <212> PRT <213> Home		ens														
<400> 117																
Met Arg A 1	rg Thr	Thr 5	Leu	Ser	Leu	Leu	Trp 10	Thr	Gly	Ser	Leu	Pro 15	Ala	•		
Pro Pro A	la Thr 20	Thr	Ser	Gly	Gly	Ala 25	Ala	Суз	Pro	Ser	Gly 30	Arg	Arg			
Tyr Pro G	ly Ala 35	Gly	Asn	Ala	Gly 40	Ser	Ala	Thr	Ser	Gln 45	Cys	Gln	Leu			
Thr Arg C 50	ys Gly	Ala	Trp	Leu 55	Ser	Ser	Thr	Ala	Arg 60	Ser	Val	Gly	Thr			
Thr Ser G 65	ly Ala	Gly	His 70	Arg	Trp	Gly	Pro	Arg 75	Pro	Pro <sub>.</sub>	Ala	Thr	Gly 80			
Ala Ala S	er Pro	Cys 85	Ile	Gln	His	Gly	Ser 90	Ser	Pro	Arg	Ala	Gly 95	Thr			

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Gly Thr Arg Ile Ala Ala Ala Pro Thr Leu Thr Pro Ala Gln Leu Pro • 100 105 110 Thr Ala Thr Thr Gly Glu Ser Pro Thr Cys Leu Gly His Pro Val Leu 115 120 125 Thr Pro Arg Ala Gly Ser Arg Thr Thr Cys Pro Lys Cys Ser Thr Pro 130 135 . 140 Ala Thr Leu Thr Leu Ala Val Ala Pro Leu Trp Pro Pro Ala 145 150 155 <210> 1176 <211> 291 <212> PRT <213> Homo sapiens <400> 1176 Met Ser Gln Glu Gly Val Glu Leu Glu Lys Ser Val Arg Arg Leu Arg 5 10 15 Glu Lys Phe His Gly Lys Val Ser Ser Lys Lys Ala Gly Ala Leu Met 20 25 30 Arg Lys Phe Gly Ser Asp His Thr Gly Val Gly Arg Ser Ile Val Tyr 35 40 45 Gly Val Lys Gln Lys Asp Gly Gln Glu Leu Ser Asn Asp Leu Asp Ala . 50 55 60 Gln Asp Pro Pro Glu Asp Met Lys Gln Asp Arg Asp Ile Gln Ala Val 65 70 75 . Ala Thr Ser Leu Leu Pro Leu Thr Glu Ala Asn Leu Arg Met Phe Gln 85 90 95 Arg Ala Gln Asp Asp Leu Ile Pro Ala Val Asp Arg Glń Phe Ala Cys 100 105 110 Ser Ser Cys Asp His Val Trp Trp Arg Arg Val Pro Gln Arg Lys Glu 115 120 125 · Val Ser Arg Cys Arg Lys Cys Arg Lys Arg Tyr Glu Pro Val Pro Ala 130 135 140 Asp Lys Met Trp Gly Leu Ala Glu Phe His Cys Pro Lys Cys Arg His 145 150 155 160 Asn Phe Arg Gly Trp Ala Gln Met Gly Ser Pro Ser Pro Cys Tyr Gly -165 170 . 175 Cys Gly Phe Pro Val Tyr Pro Thr Arg Ile Leu Pro Pro Arg Trp Asp 180 185 190 Arg Asp Pro Asp Arg Arg Ser Thr His Thr His Ser Cys Ser Ala Ala 195 200 205

647 <sup>·</sup>

Asp Cys Tyr Asn Arg Arg Glu Pro His Val Pro Gly Thr Ser Cys Ala 210 215 220 His Pro Lys Ser Arg Lys Gln Asn His Leu Pro Lys Val Leu His Pro 225 230 235 240 Ser Asn Pro His Ile Ser Ser Gly Ser Thr Val Ala Thr Cys Leu Ser 250 245 255 Gin Gly Gly Leu Leu Glu Asp Leu Asp Asn Leu Ile Leu Glu Asp Leu 260 265 270 Lys Glu Glu Glu Glu Glu Glu Glu Glu Val Glu Asp Glu Glu Gly Gly · 275 280 285 Pro Arg Glu 290 <210> 1177 <211> 125 <212> PRT <213> Homo sapiens <400> 1177 Met Arg Gly Thr Gln Leu Val Leu Leu Ala Leu Val Leu Ala Ala Cys 1 ... ·. 5. 10. 15 Gly Glu Leu Ala Pro Ala Leu Arg Cys Tyr Val Cys Pro Glu Pro Thr 20 25 30 Gly Val Ser Asp Cys Val Thr Ile Ala Thr Cys Thr Thr Asn Glu Thr 35 40 45 . Met Cys Lys Thr Thr Leu Tyr Ser Arg Glu Ile Val Tyr Pro Phe Gln 50 55. 60 Gly Asp Ser Thr Val Thr Lys Ser Cys Ala Ser Lys Cys Lys Pro Ser 65 70 75 80 Asp Val Asp Gly Ile Gly Gln Thr Leu Pro Val Ser Cys Cys Asn Thr 85 . 95 90 Glu Leu Cys Asn Val Asp Gly Ala Pro Ala Leu Asn Ser Leu His Cys . 100 105 110 Gly Ala Leu Thr Leu Leu Pro Leu Leu Ser Leu Arg Leu 115 120 125 <210> 1178 <211> 6 <212> PRT <213> Homo sapiens -<220> <221> SITE <222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1178 Gly Thr Gln Xaa Ala Leu 1 5

<210> 1179 <211> 125 <212> PRT <213> Homo sapiens <400> 1179 Met Arg Gly Thr Gln Leu Val Leu Leu Ala Leu Val Leu Ala Ala Cys 1 5 10 15 Gly Glu Leu Ala Pro Ala Leu Arg Cys Tyr Val Cys Pro Glu Pro Thr 20 25 30 Gly Val Ser Asp Cys Val Thr Ile Ala Thr Cys Thr Thr Asn Glu Thr 35 40 45 Met Cys Lys Thr Thr Leu Tyr Ser Arg Glu Ile Val Tyr Pro Phe Gln 50 55 60 Gly Asp Ser Thr Val Thr Lys Ser Cys Ala Ser Lys Cys Lys Pro Ser 65 . 70 75 80 Asp Val Asp Gly Ile Gly Gln Thr Leu Pro Val Ser Cys Cys Asn Thr 85 90 95 Glu Leu Cys Asn Val Asp Gly Ala Pro Ala Leu Asn Ser Leu His Cys 100 105 110 Gly Ala Leu Thr Leu Leu Pro Leu Leu Ser Leu Arg Leu · 120 115 125 <210> 1180 <211> 132 <212> PRT <213> Homo sapiens <220> <221> SITE . <222> (104) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (120) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1180 Met Pro Asp Val Gln Gly Pro Trp His Pro Ala His Pro Pro Ile Pro 5 1 10 • 15

Ser Ala Ala Leu Cys Leu Leu Trp Pro His Cys Leu Ala Ala Pro Lys

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ני	ſyr	Ala	Arg 35	Pro	Arg	Cys	Leu	Leu 40	Val	Phe	Val	Leu	Cys 45	Asp	Arg	Ser	
P	Ala	Trp 50	Asn	Ile	Leu	Leu	Tyr 55	Ser	Val	Gly	Ser	Lys 60	Val	Ser	Gly	Leu	
C	Cys 65	Ser	Asn	Cys	Ser	Leu 70	Val	Pro	Gly	Val	Val 75	Ala	His	Thr	Cys	Asn 80	
E	ro	Lys	Val	Pro	Leu 85	Gly	Leu	Gln	Gly	Cys 90	Glu	Leu	Pro	Cys	Pro 95	Ala	•
Ģ	lu	His	Leu	Ile 100	Phe	Ser	Lys	Xaa	Leu 105	Ser	Ser	Cys	Ala	Thr 110	Trp	Ala	
H	lis	Cys	Phe 115	Leu	Gly	Leu	Ser	Xaa 120	Cys	Trp	Cys	Leu	His 125	Pro	His	Pro	
H	lis	Pro 130	Ser	Trp													·
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<	:211 :212	)> 11 .> 92 !> PH i> Ho	2 ?T	sapie	ens			-									
<	400	)> 11	L81														
S	Ser 1	Gly	Leu	Ala	Trp 5	Ala	Leu	Leu	Leu	Ser 10	Leu	Pro	Gly	Gly	Leu 15	Arg	
S	Ser	Ser	Ser	Ala 20	Arg	Leu	Pro	Pro	Glu 25	Pro	Phe	His	Gly	Gln 30	Gly	Leu	
۰S	Ser	Ser	Val 35	Gly	Ala -	Ile	Arg	Arg 40	Arg	Val	Cys	Arg	Ser 45	Val	Arg	Leu	
G	ly	Asp 50	Pro	Trp	Gly	Met	Glu 55	Gly	Thr	Thr	Arg	Pro 60	Phe	Pro	Ser	Val	
E	ro 65	Cys	Gln	Ala	Val	Leu 70	Thr	Ala	Ala	Ser	Ser 75	Gln	Gly	Arg ,	Lys	Pro 80	
G	ly	Gln	Arg	Gln	Arg 85	Leu	Leu	Val	Pro	Ser 90	Ile	Pro					
<	211 212	)> 11 .> 13 !> PH !> Ho	39 RT	sapie	ens												
		)> 13 Phe		Leu	Val 5	Ser	Ala	His	Leu	Lys 10	Thr	Arg	Lýs	Leu	Ile 15	Asn	
	•													-			
									6	550			•	•			

Pro Glu Ala Ala Glu Arg Arg Trp Arg Asp Trp Asp Ser Arg Gln Gly Trp Leu Ser Val Lys Met Gln Arg Val Ser Gly Leu Leu Ser Trp Thr Leu Ser Arg Val Leu Trp Leu Ser Gly Leu Ser Glu Pro Gly Ala Ala . Arg Gln Pro Arg Ile Met Glu Glu Lys Ala Leu Glu Val Tyr Asp Leu Ile Arg Thr Ile Arg Asp Pro Glu Lys Pro Asn Thr Leu Glu Glu Leu 90 · Glu Val Val Ser Glu Ser Cys Val Glu Val Gln Glu Ile Asn Glu Glu Glu Tyr Leu Val Ile Ile Arg Phe Thr Pro Thr Val Pro His Cys Ser Leu Ala Thr Leu Ile Val Gly Asn Leu His Phe <210> 1183 <211> 143 <212> PRT <213> Homo sapiens <400> 1183 Met Pro Asp Val Gln Gly Pro Trp His Pro Ala His Pro Pro Ile Pro Ser Ala Ala Leu Cys Leu Leu Trp Pro His Cys Leu Ala Ala Pro Lys Tyr Ala Arg Pro Arg Cys Leu Leu Val Phe Val Leu Cys Asp Arg Ser Ala Trp Asn Ile Leu Leu Tyr Ser Val Gly Ser Lys Val Ser Gly Leu Cys Ser Asn Cys Ser Leu Val Pro Gly Val Val Ala His Thr Cys Asn 75 . Pro Lys Val Pro Leu Gly Leu Gln Gly Cys Glu Leu Pro Cys Pro Ala Glu His Leu Ile Phe Ser Lys Cys Leu Ser Ser Cys Ala Thr Trp Ala 100 105 His Cys Phe Leu Gly Leu Ser Cys Cys Trp Cys Leu His Pro His Pro . His Pro Ser Trp Pro Ala Pro Phe Leu Ser Arg Trp Ala His Val 

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<210> 1184 <211> 13 <212> PRT <213> Homo sapiens <400> 1184 Met Gly Gln Gly Ala Cys Lys Asn Met Ser Val Gly Ser 1 5 10 <210> 1185 <211> 102 <212> PRT <213> Homo sapiens . <400> 1185 Asn Ser Glu Lys Gly Gln Lys Lys Gln Arg Gly Pro Arg Trp Ile Cys 1 5 10 15 Gln Leu Phe Cys Arg Cys Phe Leu Pro Leu Leu Trp Val Val Cys Ser . 20 25 30 Pro Leu Gln Thr Ser Ala Arg Arg Glu Gly Leu Asn Leu Pro Ala Pro 35 40 45 · -Gln-Asp Leu Leu Pro Ser Gly Pro Ser Pro Ala Leu Arg Ser Leu Pro 50 · 55 . 60 Asp Arg Arg Val Asp Arg Ala Thr Trp Ala Ala Arg Glu Thr His Gly 65 · 70 75 80 Gly Pro Pro Cys Gly Gln Pro Cys Gln Leu Pro Pro Ser Pro Glu Leu 85 90 95 His Leu His Leu Glu Glu 100 <210> 1186 <211> 259 <212> PRT . : <213> Homo sapiens <220> <221> SITE <222> (62) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1186 Ala Gly Ala Trp Val Ser Leu Gly Pro Cys Leu Phe Pro Ala Pro Ala 5 1 10 15 Asp Ser Glu Gln Arg Pro Trp Val Arg Arg Val Gly Val Gly Pro Leu 20 25 30 Pro Ala Glu Pro Gly Gln Gly Glu Leu Gln Glu Ser Pro Leu Cys Pro 35 40 45

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Cys	Ser 50	Trp	Asn	Val	Pro	Gln 55	Arg	Pro	His	Leu	Lys 60	Gly	Xaa	Cys	Ala	
Gly 65	Gly	Val	Ala	Gln	Ser 70	His	Thr	Ala	Ser	Thr 75	Leu	Ser	Ser	Gly	Thr 80	
Gly	Asp	Ser	Gly	Cys 85	Ser	Ġly	Lys	Gly	Leu 90	Leu	Asp	Val	Thr	Tyr 95	Asn	
Ser	Val	Arg	Leu 100	Glu	Thr	Asp	Ala	Gly 105	Gly	Gly	Arg	Ala	Gly 110	Pro	Pro	
Gly	Ile	Thr 115	Asp	His <sup>.</sup>	Arg	Lys	Met 120	Gly	Gly	Gly	Ser	Arg 125	Gly	Pro	Ala	
Pro	Thr 130	Pro	Ser	Cys	Leu	Thr 135	Leu	Leu	Ser	Cys	Pro 140	His	Pro	Cys	Ala	
Phe 145	Val	Pro	Glu		Arg 150		Ala	Thr	Gln	Ala 155	Gly	Pro	Gly	Ser	Ser 160	
Leu	Ile	Leu	Pro	Leu 165	Pro	Ser	Glų	Pro	Cys 170	Ser	Ser	Leu	Pro	Ser 175	Pro	
Leu	Pro	Pro	Leu 180	Pro	Arg	Arg	Val	Thr 185	Ser	Asp	Arg	Ala	Pro 190	Leu	Ala	
Ile	Gln	Gly 195	Gly	Ser	Arg	Gly	Leu 200	Asp	Arg	Arg	Ala	Arg 205	Arg	Leu	Pro	
Ala	Val 210	Ala	Gly	Ala	Ser	Cys 215	Pŗro	Cys	Arg	Val	Gly 220	Glu	Leu	Ser	Gly	
Arg 225	Glu	Pro	Tyr	Leu	Pro 230	Ser	Ala	Lys	Thr	Val 235	Lys	Val	Tyr	Arg	Leu 240	
Phe	Thr	Asp∙	Phe	Tyr 245	Leu	Asn	Cys	Lys	Ser 250	Ala	Asp	Phe	Val	Asn 255	Val	•
Leu	Gly	Val						•							·	

**<210> 1187** <sup>.</sup> <211> 119 <212> PRT <213> Homo sapiens <400> 1187 Met Gly Gln.Gly Ala Cys Gln Lys Tyr Val Cys Trp Phe Leu Asn Val 1 5 10 15 Val Cys Pro Cys Pro Pro Gly Ser Gly Arg Val His Val Ser Pro His 20 25 . 30 . Thr Cys Ala Arg Glu Gly Ala Ser Trp Arg Gly Asp Ser Arg Ala Arg 35 40 45 .

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Gly Leu His Leu Trp Leu Pro Leu Ala Ser Leu Gly Gly Pro Gly Leu 60 . Pro Gly Ser Gln Ala Leu Ser Cys Gly Thr Trp His Leu Ala Asp Gln Leu Ala Gly Arg Lys Ile Gly Gly His Arg Ala Gly Gly Gln Cys Pro Leu Pro Val Ser Ile Arg Ser Thr Cys His Cys Met Gln Pro Val Gly Thr Phe Leu Ala Val Arg Asn <210> 1188 <211> 177 <212> PRT <213> Homo sapiens <400> 1188 Met Arg Gly Ser Val Glu Cys Thr Trp Gly Trp Gly His Cys Ala Pro Ser Pro Leu Leu Trp Thr Leu Leu Leu Phe Ala Ala Pro Phe Gly Leu Leu Gly Glu Lys Thr Arg Gln Val Ser Leu Glu Val Ile Pro Asn Trp Leu Gly Pro Leu Gln Asn Leu Leu His Ile Arg Ala Val Gly Thr .50 Asn Ser Thr Leu His Tyr Val Trp Ser Ser Leu Gly Pro Leu Ala Val Val Met Val Ala Thr Asn Thr Pro His Ser Thr Leu Ser Val Asn Trp Ser Leu Leu Ser Pro Glu Pro Asp Gly Gly Leu Met Val Leu Pro Lys Asp Ser Ile Gln Phe Ser Ser Ala Leu Val Phe Thr Arg Leu Leu • Glu Phe Asp Ser Thr Asn Val Ser Asp Thr Ala Ala Lys Pro Leu Gly . 135 Arg Pro Tyr Pro Pro Tyr Ser Leu Ala Asp Phe Ser Trp Asn Asn Ile -150 Thr Asp Ser Leu Asp Pro Ala Thr Leu Ser Ala Thr Phe Gln Gly Thr 

Pro

<210> 1189 <211> 330 <212> PRT <213> Homo sapiens <400> 1189 Arg Pro Thr Arg Pro Leu Asn Cys Gly Arg Met Arg Gly Ser Val Glu . 5 Cys Thr Trp Gly Trp Gly His Cys Ala Pro Ser Pro Leu Leu Trp 30 ' Thr Leu Leu Leu Phe Ala Ala Pro Phe Gly Leu Leu Gly Glu Lys Thr Arg Gln Leu Leu Glu Phe Asp Ser Thr Asn Val Ser Asp Thr Ala Ala Lys Pro Leu Gly Arg Pro Tyr Pro Pro Tyr Ser Leu Ala Asp Phe Ser ·, · 75 Trp Asn Asn Ile Thr Asp Ser Leu Asp Pro Ala Thr Leu Ser Ala Thr . 95 Phe Gln Gly His Pro Met Asn Asp Pro Thr Arg Thr Phe Ala Asn Gly Ser Leu Ala Phe Arg Val Gln Ala Phe Ser Arg Ser Ser Arg Pro Ala Gln Pro Pro Arg Leu Leu His Thr Ala Asp Thr Cys Gln Leu Glu Val Ala Leu Ile Gly Ala Ser Pro Arg Gly Asn Arg Ser Leu Phe Gly Leu Glu Val Ala Thr Leu Gly Gln Gly Pro Asp Cys Pro Ser Met Gln Glu 170 · Gln His Ser Ile Asp Asp Glu Tyr Ala Pro Ala Val Phe Gln Leu Asp Gln Leu Leu Trp Gly Ser Leu Pro Ser Gly Phe Ala Gln Trp Arg Pro Val Ala Tyr Ser Gln Lys Pro Gly Gly Arg Glu Ser Ala Leu Pro Cys Gln Ala Ser Pro Leu His Pro Ala Leu Ala Tyr Ser Leu Pro Gln Ser Pro Ile Val Arg Ala Phe Phe Gly Ser Gln Asn Asn Phe Cys Ala Phe Asn Leu Thr Phe Gly Ala Ser Thr Gly Pro Gly Tyr Trp Asp Gln His Tyr Leu Ser Trp Ser Met Leu Leu Gly Val Gly Phe Pro Pro Val Asp 

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Gly Leu Ser Pro Leu Val Leu Gly Ile Met Ala Val Ala Leu Gly Ala 290 295 30.0 Pro Gly Leu Met Leu Leu Gly Gly Gly Leu Val Leu Leu His His 305 310 315 320 Lys Lys Tyr Ser Glu Tyr Gln Ser Ile Asn . 325 330 • . <210> 1190 <211> 95 <212> PRT <213> Homo sapiens <400> 1190 Met Ala Ala Ser Arg Trp Ala Arg Lys Ala Val Val Leu Leu Cys Ala 5 1 10 Ser Asp Leu Leu Leu Leu Leu Leu Leu Pro Pro Pro Gly Ser Cys · 20 25 30 Ala Ala Glu Ala Arg Pro Gly Arg Pro Thr Ser Leu Pro His Leu Pro 35 • 40 45 Gly Arg Arg Arg Ile Phe Ala Ile Thr Met Met Gln Thr Trp Arg 50 55 60 Val Phe Trp Ser Asn Gly Arg Lys Met Met Thr Leu Lys Lys Glu Ile 70 65 75 . 80 Phe Gln Ser Thr Arg Asp Leu Gln His Leu Ser Thr Ser Gln Arg 85 90 95 <210> 1191 <211> 234 <212> PRT <213> Homo sapiens <400> 1191 Met Ala Ala Ser Arg Trp Ala Arg Lys Ala Val Val Leu Leu Cys Ala 1 10 5 15 Ser Asp Leu Leu Leu Leu Leu Leu Leu Pro Pro Pro Gly Ser Cys 20 . . 25 30 . Ala Ala Glu Gly Ser Pro Gly Thr Pro Asp Glu Ser Thr Pro Pro Pro 35 40 . 45 Arg Lys Lys Lys Asp Ile Arg Asp Tyr Asn Asp Ala Asp Met Ala 50 55 60 Arg Leu Leu Glu Gln Trp Glu Lys Asp Asp Asp Ile Glu Glu Gly Asp 65 75 70 80 Leu Pro Glu His Lys Arg Pro Ser Ala Pro Val Asp Phe Ser Lys Ile

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656<sup>°</sup>

				85					90					95	•
Asp	Pro	Ser	Lys 100	Pro	Glu	Ser	Ile	Leu 105	Lys	Met	Thr	Lys	Lys 110	Gly	Lys
Thr	Leu	Met 115	Met	Phe	Val	Thr	Val 120	Ser	Gly		Pro	Thr 125	Glu	Lys	Glu
Thr	Glu 130	Glu	Ile	Thr	Ser	Leu 135	Trp	Gln	Gly	Ser	Leu 140	Phe	Asn	Ala	Asn
Tyr 145	Asp	Val	Gln	Arg	Phe 150	Ile	Val	Gly	Ser	Asp 155	Arg	Ala	Ile	Phe	Met 160
Leu	Arg	Asp	Gly	Ser 165	Tyr	Ala	Trp	Glu	Ile 170	Lys	Asp	Phe	Leu	Val 175	Gly
Gln	Asp	Arg	Cys 180	Ala	Asp	Val	Thr	Leu 185	Glu	Gly	Gln	Val	Tyr 190	Pro	Gly
Lys	Gly	Gly 195	Gly	Ser	Lys	Glu	Lys 200		Lys	Thr	Lys	Gln 205	Asp	Lys	Gly
Lys	Lys 210	Lys	Lys	Glu	Gly	Asp 215	Leu	Lys	Ser	Arg	Ser 220	Ser	Lys	Glu	Glu
Asn 225	Arg	Ala	Gly	Asn	Lys 230	Arg	Glu	Asp	Leu	•					• • :
					·					•					
<211 <212	)> 11 L> 1( 2> PH 3> Ho	08	apie	ens .											
<400	)> 11		-												
Met		192	-												
1	Arg		Leu	Ser 5	Gly	Gly	Glu	Arg	Ser 10	Phe	Ser	Thr	Val	Cys 15	Phe
1		Ala		Ser					10					15	
1 Ile	Leu	Ala Ser	Leu 20	Ser 5	Ser	Ile	Ala	Glu 25	 Ser	Pro <sub>.</sub>	Phe	Arg	Cys 30	15 Leu	Asp
1 Ile Glu	Leu Phe	Ala Ser Asp 35	Leu 20 Val	Ser 5 Trp	Ser Met	Ile Asp	Ala Met 40	Glu 25 Val	10 Ser Asn	Pro Arg	Phe Arg	Arg Ile 45	Cys 30 Ala	15 Leu Met	Asp Asp
1 Ile Glu Leu	Leu Phe Ile 50	Ala Ser Asp 35 Leu	Leu 20 Val Lys	Ser 5 Trp Tyr	Ser Met Ala	Ile Asp Asp 55	Ala Met 40 Ser	Glu 25 Val Gln	 Ser Asn Arg	Pro Arg Phe	Phe Arg Arg 60	Arg Ile 45 Gln.	Cys 30 Ala Phe	15 Leu Met Ile	Asp Asp Leu
1 Ile Glu Leu 65	Leu Phe Ile 50 Thr	Ala Ser Asp 35 Leu Pro	Leu 20 Val Lys Gln	Ser 5 Trp Tyr Met	Ser Met Ala Met 70	Ile Asp Asp 55 Ser	Ala Met 40 Ser Ser	Glu 25 Val Gln Leu	10 Ser Asn Arg Pro	Pro Arg Phe Ser 75	Phe Arg Arg 60 Ser	Arg Ile 45 Gln Lys	Cys 30 Ala Phe Leu	15 Leu Met Ile Ile	Asp Asp Leu Arg 80

657

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Ser Ser Thr Thr Leu Gly Pro Ile Phe Trp Leu Leu Val Lys Ser Pro Glu Leu Ala Ala Gln Pro Ser Thr Tyr Leu Ala Val Ala Glu Glu Leu Ala Asp Val Ser Gly Lys Tyr Phe Asp Gly Leu Lys Gln Lys Ala Pro Ala Pro Glu Ala Glu Asp Glu Glu Val Ala Arg Arg Leu Trp Ala Glu 115 . 120 . . Ser Ala Arg Leu Val Gly Leu Glu Ala Pro Ser Val Arg Glu Gln Pro • 140 Leu Pro Arg 145 . <210> 1195 <211> 240 <212> PRT <213> Homo sapiens <400> 1195 · Met Ser Arg Tyr Leu Leu Pro Leu Ser Ala Leu Gly Thr Val Ala Gly Ala Ala Val Leu Leu Lys Asp Tyr Val Thr Gly Gly Ala Cys Pro Ser Lys Ala Thr Ile Pro Gly Lys Thr Val Ile Val Thr Gly Ala Asn Thr Gly Ile Gly Lys Gln Thr Ala Leu Glu Leu Ala Arg Arg Gly Gly Asn Ile Ile Leu Ala Cys Arg Asp Met Glu Lys Cys Glu Ala Ala Ala Lys Asp Ile Arg Gly Glu Thr Leu Asn His His Val Asn Ala Arg His Leu 85 90 . Asp Leu Ala Ser Leu Lys Ser Ile Arg Glu Phe Ala Ala Lys Ile Ile Glu Glu Glu Arg Val Asp Ile Leu Ile Asn Asn Ala Gly Val Met . Arg Cys Pro His Trp Thr Thr Glu Asp Gly Phe Glu Met Gln Phe Gly Val Asn His Leu Gly His Phe Leu Leu Thr Asn Leu Leu Leu Asp Lys Leu Lys Ala Ser Ala Pro Ser Arg Ile Ile Asn Leu Ser Ser Leu Ala 

His Val Ala Gly His Ile Asp Phe Asp Asp Leu Asn Trp Gln Thr Arg 180 185 190 Lys Tyr Asn Thr Lys Ala Ala Tyr Cys Gln Ser Lys Leu Ala Ile Val 195 200 205 Leu Phe Thr Lys Glu Leu Ser Arg Arg Leu Gln Gly Thr Gly Ala Leu 210 215 220 Gly Ser Ala Ser Leu Leu Leu Tyr Ser Glu Pro Arg Ala Ala Phe Pro 225 230 235 240 <210> 1196 <211> 174 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (142) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (160) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (162) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1196 Met Ala Val Ala Arg Leu Ala Ala Val Ala Ala Trp Val Pro Cys Arg 5 10 . 1 15 Ser Trp Gly Trp Ala Ala Val Pro Phe Gly Pro His Arg Gly Leu Ser 20 · 25 30 Val Leu Leu Ala Arg Ile Pro Gln Arg Ala Pro Arg Trp Leu Pro Ala 35 40 45 Cys Arg Gln Lys Thr Ser Leu Ser Phe Leu Asn Arg Pro Asp Leu Pro 50 55 60 Asn Leu Ala Tyr Lys Lys Leu Lys Gly Lys Ser Pro Gly Ile Ile Phe 65 75 70 80 Ile Pro Gly Tyr Leu Ser Tyr Met Asn Gly Thr Lys Ala Leu Ala Ile 85 90 · 95 . Glu Glu Phe Cys Lys Ser Leu Gly His Ala Cys Ile Arg Phe Asp Tyr 100 105 110 .

Ser Gly Val Gly Ser Ser Asp Gly Asn Ser Glu Glu Ser Thr Leu Gly 115 . 120 . 1.25 Lys Trp Arg Lys Asp Val Leu Ser Ile Ile Asp Asp Leu Xaa Asp Gly 130 135 140 Pro Gln Ile Leu Val Gly Ser Ser Leu Gly Gly Trp Leu Met Leu Xaa 150 145 <sup>°</sup> 155 160 Ala Xaa Asn Cys Thr Thr Arg Glu Gly Leu Ala Leu Ile Gly 165 170 <210> 1197 <211> 160 <212> PRT <213> Homo sapiens <400> 1197 Ile Leu Val Gly Ser Ser Leu Gly Gly Trp Leu Met Leu His Ala Ala 1 . 5 10 15 Ile Ala Arg Pro Glu Lys Val Val Ala Leu Ile Gly Val Ala Thr Ala 20 25 30 . Ala Asp Thr Leu Val Thr Lys Phe Asn Gln Leu Pro Val Glu Leu Lys 40 · 35 . 45 Lys Glu Val Glu Met Lys Gly Val Trp Ser Met Pro Ser Lys Tyr Ser 50 55 60 . . Glu Glu Gly Val Tyr Asn Val Gln Tyr Ser Phe Ile Lys Glu Ala Glu 65 70 75 80<sup>.</sup> His His Cys Leu Leu His Ser Pro Ile Pro Val Asn Cys Pro Ile Arg 85 90 95 Leu Leu His Gly Met Lys Asp Asp Ile Val Pro Trp His Thr Ser Met 100 105 110 · Gln Val Ala Asp Arg Val Leu Ser Thr Asp Val Asp Val Ile Leu Arg 120 . 125 115 Lys His Ser Asp His Arg Met Arg Glu Lys Ala Asp Ile Gln Leu Leu 130 135 140 Val Tyr Thr Ile Asp Asp Leu Ile Asp Lys Leu Ser Thr Ile Val Asn 155 145 150 160

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	Ala	Lys	Asp	Pro 100	Cys	Leu	Lys	Met	Lys 105	Cys	Ser	Arg	His	Lys 110	Val	Cys	
	Ile	Ala	Gln 115	Asp	Ser	.Gln	Thr	Ala 120	Val	Cys	Ile	Ser	His 125	Arg	Arg	Leu	
	Thr	His 130	Arg	Met	Lys	Glu	Ala 135	Gly	Val	Asp	His	Arg 140	Gln	Trp	Arg	Gly	
	Pro 145	Ile	Leu	Ser	Thr	Cys 150	Lys	Gln	Cys	Pro	Val 155	Val	Tyr	Pro	Ser	Pro 160	
	Val	Cys	Gly	Ser	Asp 165	Gly	His	Thr	Týr	Ser 170	Phe	Gln	Cys	Lys	Leu 175	Glu	
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•	Lys	Arg 210	Ala	Cys	Ser	Asp	Leu 215	Glu	Phe	Arg	Glu	Val 220	Aİa	Asn	Arg	Leu	
	Arg 225	Asp	Trp	Phe	Lys	Ala 230	Leu	His	Glu	Ser	Gly 235	Ser	Gln	Asn	Lys	Lys 240	
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	Thr	Asn	Tyr 275	Asp	Leu	Leu	Leu	Asp 280	Gln	Ser	Glu	Leu	Arg 285	Ser	Ile	Tyr	
	Leu	Asp 290	Lys	Asn	Glu	Gln	Cys 295	Thr	Lys	Ala	Phe	Phe 300	Asn	Ser	Cys	Asp	
	Thr 305	Tyr	Lys	Asp	Ser	Leu 310	Ile	Ser	Asn	Asn	Glu 315	Trp	Суз	Tyr	Cys	Phe 320	
	Gln	Arg	Gln	Gln	Asp 325	Pro	Pro	Cys	Gln	Thr 330	Glu	Leu	Ser	Asn	Ile 335	Gln	•
	Lys	Arg	Gln	Gly 340	Val	Lys	Lys	Leu	Leu 345	Gly	Gln	Tyr	Ile	Pro 350	Leu	Cys	•
	Asp	Glu	Asp 355	Gly	Tyr	Tyr	Lys	Pro 360	Thr	Gln	Cys	His	Gly 365	Ser	Val	Gly	
	Gln	Cys 370	Trp	Cys	Val	Asp	Arg 375	Tyr	Gly	Asn	Glu	Val 380	Met	Gly	Ser	Arg	
	Ile 385	Asn	Gly	Val	Ala	Asp 390	Cys	Ala	Ile	Asp	Phe 395	Glu	Ile	Ser	Gly	Asp 400	
	Phe	Ala	Ser	Gly	Asp 405	Phe	His	Glu	Trp	Thr 410	Asp	Asp	Glu	Asp	Asp 415	Glu	

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Asp Asp Ile Met Asn Asp Glu Asp Glu Ile Glu Asp Asp Asp Glu Asp Glu Gly Asp Asp Asp Asp Gly Gly Asp Asp His Asp Val Tyr Ile <210> 1202 <211> 551 <212> PRT <213> Homo sapiens <400> 1202 Met Gly Ser Trp Ala Leu Leu Trp Pro Pro Leu Leu Phe Thr Gly Leu . 10 . 15 Leu Val Arg Pro Pro Gly Thr Met Ala Gln Ala Gln Tyr Cys Ser Val • . Asn Lys Asp Ile Phe Glu Val Glu Glu Asn Thr Asn Val Thr Glu Pro Leu Val Asp Ile His Val Pro Glu Gly Gln Glu Val Thr Leu Gly Ala Leu Ser Thr Pro Phe Ala Phe Arg Ile Gln Gly Asn Gln Leu Phe Leu Asn Val Thr Pro Asp Tyr Glu Glu Lys Ser Leu Leu Glu Ala Gln Leu Leu Cys Gln Ser Gly Gly Thr Leu Val Thr Gln Leu Arg Val Phe Val Ser Val Leu Asp Val Asn Asp Asn Ala Pro Glu Phe Pro Phe Lys Thr Lys Glu Ile Arg'Val Glu Glu Asp Thr Lys Val Asn' Ser Thr Val Ile Pro Glu Thr Gln Leu Gln Ala Glu Asp Arg Asp Lys Asp Asp Ile Leu ·145 • Phe Tyr Thr Leu Gln Glu Met Thr Ala Gly Ala Ser Asp Tyr Phe Ser Leu Val Ser Val Asn Arg Pro Ala Leu Arg Leu Asp Arg Pro Leu Asp . Phe Tyr Glu Arg Pro Asn Met Thr Phe Trp Leu Leu Val Arg Asp Thr 195 , Pro Gly Glu Asn Val Glu Pro Ser His Thr Ala Thr Ala Thr Leu Val 215 . 220 . Leu Asn Val Val Pro Ala Asp Leu Arg Pro Pro Trp Phe Leu Pro Cys 

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Thr Phe Ser Asp Gly Tyr Val Cys Ile Gln Ala Gln Tyr His Gly Ala Val Pro Thr Gly His Ile Leu Pro Ser Pro Leu Val Leu Arg Pro Gly Pro Ile Tyr Ala Glu Asp Gly Asp Arg Gly Ile Asn Gln Pro Ile Ile Tyr Ser Ile Phe Arg Gly Asn Val Asn Gly Thr Phe Ile Ile His Pro Asp Ser Gly Asn Leu Thr Val Ala Arg Ser Val Pro Ser Pro Met Thr . Phe Leu Leu Val Lys Gly Gln Gln Ala Asp Leu Ala Arg Tyr Ser Val Thr Gln Val Thr Val Glu Ala Val Ala Ala Ala Gly Ser Pro Pro Arg Phe Pro Glin Ser Leu Tyr Arg Gly Thr Val Ala Arg Gly Ala Gly Ala Gly Val Val Val Lys Asp Ala Ala Ala Pro Ser Gln Pro Leu Arg -Ile Gln Ala Gln Asp Pro Glu Phe-Ser Asp Leu Asn Ser Ala Ile Thr . . . . . . . Tyr Arg Ile Thr Asn His Ser His Phe Arg Met Glu Gly Glu Val Val Leu Thr Thr Thr Leu Ala Gln Ala Gly Ala Phe Tyr Ala Glu Val Ala Ala Pro Arg Arg Thr Ser Ala Ser Arg Trp Trp Ile Trp Arg Pro Trp Ala Gly Cys Trp Val Arg Cys Cys Cys Trp Leu Ser Leu Ala Ser Pro Ser Leu Ser Thr Ser Thr Met Ala Pro Gly Ser Ser Ala Ala Leu Ala Lys Leu Arg Ser Pro Ser Pro Lys Ala Leu Thr Thr Arg Arg Ser Ser Leu Thr Thr Arg Pro Thr Gly Arg Pro Ser Pro Ala Pro Arg Thr Thr Pro Ser Pro Arg Arg His Arg Cys Pro Gln Ser Pro His Pro Pro Ala Leu Pro Pro Gln Ala Val Pro Leu Ser Pro Pro Gln Arg Pro Glu . Leu Ala Glu Ala Pro Arg Arg 

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Ala Gly Pro Ser Leu Ala Arg Pro Phe Gly Ala Trp Gly Leu Gly Thr

180

190

Phe

<210> 1207 <211> 349 <212> PRT <213> Homo sapiens <400> 1207 Gly Lys Leu Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp 5 10 15 Pro Arg Val Arg Asp Asp Thr Gly Pro Pro Met Asp Lys Ser Asp Leu 20 25 30 Gly Gln Lys Arg Thr Ser Gly Ala Val Cys His Gln Asp Pro Arg Thr 35 40 45 Cys Glu Glu Pro Ala Ser Ser Gly Ala His Ile Trp Pro Asp Asp Ile 50 55 . 60 Thr Lys Trp Pro Ile Cys Thr Glu Gln Ala Arg Ser Asn His Thr Gly 65 70 75 80 Phe Leu His Val Asp Cys Glu Ile Lys Gly Arg Pro Cys Cys Ile Gly 85 90 95 Thr Lys Gly Ser Cys Glu Ile Thr Thr Arg Glu Tyr Cys Glu Phe Met 100 · 105 110 His Gly Tyr Phe His Glu Glu Ala Thr Leu Cys Ser Gln Val His Cys 115 120 125 Leu Asp Lys Val Cys Gly Leu Leu Pro Phe Leu Asn Pro Glu Val Pro 130 135 140 Asp Gln Phe Tyr Arg Leu Trp Leu Ser Leu Phe Leu His Ala Gly Val 145 · 1.50 155 160 Val His Cys Leu Val Ser Val Val Phe Gln Met Thr Ile Leu Arg Asp 165 170 175 Leu Glu Lys Leu Ala Gly Trp His Arg Ile Ala Ile Ile Phe Ile Leu 180 . 185 190 Ser Gly Ile Thr Gly Asn Leu Ala Ser Ala Ile Phe Leu Pro Tyr Arg . 205 195 200 Ala Glu Val Gly Pro Ala Gly Ser Gln Phe Gly Leu Leu Ala Cys Leu 210 215 . 220 . Phe Val Glu Leu Phe Gln Ser Trp Pro Leu Leu Glu Arg Pro Trp Lys 225 230 235 240 . Ala Phe Leu Asn Leu Ser Ala Ile Val Leu Phe Leu Phe Ile Cys Gly 245 250 255

Leu Leu Pro Trp Ile Asp Asn Ile Ala His Ile Phe Gly Phe Leu Ser 260 265 270 Gly Leu Leu Ala Phe Ala Phe Leu Pro Tyr Ile Thr Phe Gly Thr · 285 275 · 280 Ser Asp Lys Tyr Arg Lys Arg Ala Leu Ile Leu Val Ser Leu Leu Ala 290 295 300 Phe Ala Gly Leu Phe Ala Ala Leu Val Leu Trp Leu Tyr Ile Tyr Pro 305 310 315 320 Ile Asn Trp Pro Trp Ile Glu His Leu Thr Cys Phe Pro Phe Thr Ser 325 330 335 Arg Phe Cys Glu Lys Tyr Glu Leu Asp Gln Val Leu His 340 345 <210> 1208 <211> 217 <212> PRT <213> Homo sapiens <400> 1208. Met Ala Gly Pro Thr Cys Arg Ser Leu Leu Leu Leu Lys Cys Leu Ala • 5 1 10 15 Glu Gly Arg Cys Leu Val Cys Pro Ser Pro Ser Val Val His Cys Leu 30 20 25 . Val Ser Val Val Phe Gln Met Thr Ile Leu Arg Asp Leu Glu Lys Leu 35<sub>.</sub> 40 45 Ala Gly Trp His Arg Ile Ala Ile Ile Phe Ile Leu Ser Gly Ile Thr 50 55 60 Gly Asn Leu Ala Ser Ala Ile Phe Leu Pro Tyr Arg Ala Glu Val Gly 65 . 70 75 80 Pro Ala Gly Ser Gln Phe Gly Leu Leu Ala Cys Leu Phe Val Glu Leu · 85 90 · 95 Phe Gln Ser Trp Pro Leu Leu Glu Arg Pro Trp Lys Ala Phe Leu Asn 100 105 110 Leu Ser Ala Ile Val Leu Phe Leu Phe Ile Cys Gly Leu Leu Pro Trp 115 . 120 125 Ile Asp Asn Ile Ala His Ile Phe Gly Phe Leu Ser Gly Leu Leu Leu 130 135 . 140 Ala Phe Ala Phe Leu Pro Tyr Ile Thr Phe Gly Thr Ser Asp Lys Tyr 150 . 145 155 160 Arg Lys Arg Ala Leu Ile Leu Val Ser Leu Leu Ala Phe Ala Gly Leu 165 170 · 175 ·

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Phe Ala Ala Leu Val Leu Trp Leu Tyr Ile Tyr Pro Ile Asn Trp Pro 180 185 190 Trp Ile Glu His Leu Thr Cys Phe Pro Phe Thr Ser Arg Phe Cys Glu 195 200 205 • Lys Tyr Glu Leu Asp Gln Val Leu His 210 215 · <210> 1209 <211> 207 <212> PRT <213> Homo sapiens <220> <sup>`</sup> <221> SITE <222> (70) .<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (71) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE and an and a second . ... <222> (72) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (73) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (75) <223> Xaa equals any of the naturally occurring L-amino acids . <220> <221> SITE <222> (81) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (89) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (90) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (95) <223> Xaa equals any of the naturally occurring L-amino acids

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65	70			75			80
Xaa Cys His Pro	Val Pro 85	Val Val	Xaa Xaa 90		Ala Ser	Xaa ( 95	
Xaa Val Xaa Pro 100		Gly Lys		Ser Glu	: Pro Gly 110		Ser
Leu Lys Leu Val	Pro Gly			Met Gly	His Leu	Xaa 1	Arg
115 Leu Leu Ser Pro	Gly Ser	120 Ile Gly 135	His Pro	_		Àla 🤉	Irp
130 Cys Pro Phe Ser			Ala Cys				
145 Gly Arg Ala Ser		Gly Pro		155 Gly Ala	Tyr Arg	Ala 1	160 Iyr
Lys Xaa Ser Gly	165 Pro Gln.	Gly Asn		Xaa Thr		175 Leu I	Pro
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Lys Thr Leu Phe Ile Phe Pro Gly Leu Leu Pro Glu Ala Pro Ser Lys Pro Gly Leu Pro Lys Pro Gln Ala Thr Val Pro Arg Lys Val Asp Gly . 165 Gly Gly Thr Ser Ala Ala Ser Lys Pro Lys Ser Thr Pro Ala Val Ile . Gln Gly Pro Ser Gly Lys Asp Lys Asp Leu Val Leu Gly Leu Ser His 205 . Leu Asn Asn Ser Tyr Asn Phe Ser Phe His Val Val Ile Gly Ser Gln Ala Glu Glu Gly Gln Tyr Ser Leu Asn Phe His Asn Cys Asn Asn Ser Val Pro Gly Lys Glu His Pro Phe Asp Ile Thr Val Met Ile Arg Glu Lys Asn Pro Asp Gly Phe Leu Ser Ala Ala Glu Met Pro Leu Phe Lys • Leu Tyr Met Val Met Ser Ala Cys Phe Leu Ala Ala Gly Ile Phe Trp Val Ser Ile Leu Cys Arg Asn Thr Tyr Ser Val Phe Lys Ile His Trp Leu Met Ala Ala Leu Ala Phe Thr Lys Ser Ile Ser Leu Leu Phe His . 320 Ser Ile Asn Tyr Tyr Phe Ile Asn Ser Gln Gly His Pro Ile Glu Gly · 335 Leu Ala Val Met Tyr Tyr Ile Ala His Leu Leu Lys Gly Ala Leu Leu Phe Ile Thr Ile Ala Leu Ile Gly Ser Gly Trp Ala Phe Ile Lys Tyr Val Leu Ser Asp Lys Glu Lys Lys Val Phe Gly Ile Val Ile Pro Met Gln Val Leu Ala Asn Val Ala Tyr Ile Ile Ile Glu Ser Arg Glu Glu . . . 400 Gly Ala Ser Asp Tyr Val Leu Trp Lys Glu Ile Leu Phe Leu Val Asp -Leu Ile Cys Cys Gly Ala Ile Leu Phe Pro Val Val Trp Ser Ile Arg His Leu Gln Asp Ala Ser Gly Thr Asp Gly Lys Val Ala Val Asn Leu Ala Lys Leu Lys Leu Phe Arg His Tyr Tyr Val Met Val Ile Cys Tyr 

Val Tyr Phe Thr Arg Ile Ile Ala Ile Leu Leu Gln Val Ala Val Pro Phe Gln Trp Gln Trp Leu Tyr Gln Leu Leu Val Glu Gly Ser Thr Leu Ala Phe Phe Val Leu Thr Gly Tyr Lys Phe Gln Pro Thr Gly Asn Asn Pro Tyr Leu Gln Leu Pro Gln Glu Asp Glu Glu Asp Val Gln Met Glu Gln Val Met Thr Asp Ser Gly Phe Arg Glu Gly Leu Ser Lys Val Asn Lys Thr Ala Ser Gly Arg Glu Leu Leu . <210> 1211 <211> 543 <212> PRT <213> Homo sapiens <400> 1211 Met Ala Val Ser Glu Arg Arg Gly Leu Gly Arg Gly Ser Pro Ala Glu Trp Gly Gln Arg Leu Leu Leu Val Leu Leu Leu Gly Gly Cys Ser Gly Arg Ile His Arg Leu Ala Leu Thr Gly Glu Lys Arg Ala Asp Ile Gln Leu Asn Ser Phe Gly Phe Tyr Thr Asn Gly Ser Leu Glu Val Glu Leu Ser Val Leu Arg Leu Gly Leu Arg Glu Ala Glu Glu Lys Ser Leu Leu Val Gly Phe Ser Leu Ser Arg Val Arg Ser Gly Arg Val Arg Ser Tyr . 85 Ser Thr Arg Asp Phe Gln Asp Cys Pro Leu Gln Lys Asn Ser Ser Ser 105 110 Phe Leu Val Leu Phe Leu Ile Asn Thr Lys Asp Leu Gln Val Gln Val · 125 Arg Lys Tyr Gly Glu Gln Lys Thr Leu Phe Ile Phe Pro Gly Leu Leu . 135 Pro Glu Ala Pro Ser Lys Pro Gly Leu Pro Lys Pro Gln Ala Thr Val Pro Arg Lys Val Asp Gly Gly Gly Thr Ser Ala Ala Ser Lys Pro Lys 175 .

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Ser	Thr	Pro	Ala 180	Val	Ile	Gln	Gly	Pro 185	Ser	Gly	Lys	Asp.	Lys 190	Asp	Leu	
Val	Leu	Gly 195	Leu	Ser	His	Leu	Asn 200	Asn	Ser	Tyr	Asn	Phe 205	Ser	Phe	His ,	
Val	Val 210	Ile	Gly	Ser	Gln	Ala 215	Glu	Glu	Gly	Gln	Tyr 220	Ser	Leu	Asn	Phe	
His 225	Asn	Cys	Asn	Asn	Ser 230	Val	Pro	Gly	Lys	Glu 235	His	Pro	Phe	Asp	Ile 240	
Thr	Val	Met	Ile	Arg 245	Glu	Lys	Asn	Pro	Asp 250	Gly	Phe	Leu	Ser	Ala 255	Ala	
Glu	Met	Pro	Leu 260	Phe	Lys	Leu	Tyr	Met 265	Val	Met	Ser	Ala	Cys 270	Phe	Leu	
		275		•	Trp		280					285				
	290	ï			Ţrp	295					300					
305					His 310					315					320	
Gly	His	Pro	Ile	Glu_ 325	Gly	Leu	Ala	Val	Met 330	Tyr	Tyr	Ile	Ala_	His 335	Leu	
·	-		340		Leu			345					350			
		355	•		Tyr		360					365				
	370				Met	375					380					
385		·			Glu 390					395			•		400	
				405	Asp				410					415		
		•	420		Arg		•	425					430	<b>-</b> .	_	
-		435	• .		Leu		440		-			445		_	-	
	450				Tyr	455					460					
465					Pro 470					475					480	
var	GTU	GTÃ	Ser	485	Leu		-ne	FIIG	490	цец	T 11T	чату	тÄт	195 195	rne	

485 490 495

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Gln Pro Thr Gly Asn Asn Pro Tyr Leu Gln Leu Pro Gln Glu Asp Glu 500 505 510 Glu Asp Val Gln Met Glu Gln Val Met Thr Asp Ser Gly Phe Arg Glu 515 520 525 Gly Leu Ser Lys Val Asn Lys Thr Ala Ser Gly Arg Glu Leu Leu 530 535 540 <210> 1212 <211> 204 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (162) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (204) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1212 Met Ala Ala Leu Ala Tyr Asn Leu Gly Lys Arg Glu Ile Asn His Tyr 5 10 15 Phe Ser Val Arg Ser Ala Lys Val Leu Ala Leu Val Ala Val Leu Leu 20 25 •. 30 Leu Ala Ala Cys His Leu Ala Ser Arg Arg Tyr Arg Gly Asn Asp Ser 35 40 · 45 Cys Glu Tyr Leu Leu Ser Ser Gly Arg Phe Leu Gly Glu Lys Val Trp 50 55 60 Gln Pro His Ser Cys Met Met His Lys Tyr Lys Ile Ser Glu Ala Lys 70 65 75 80 Asn Cys Leu Val Asp Lys His Ile Ala Phe Ile Gly Asp Ser Arg Ile 85 90 . 95 Arg Gln Leu Phe Tyr Ser Phe Val Lys Ile Ile Asn Pro Gln Phe Lys 100 105 110 Glu Glu Gly Asn Lys His Glu Asn Ile Pro Phe Glu Asp Lys Thr Ala 115 120 125 Ser Val Lys Val Asp Phe Leu Trp His Pro Glu Val Asn Gly Ser Met 130 135 140 Lys Gln Cys Ile Lys Val Trp Thr Glu Asp Ser Ile Ala Lys Pro His 145 150 ·155 160 Val Xaa Val Ala Gly Ala Ala Thr Trp Ser Ile Lys Ile His Asn Gly 165 170 175 .

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Ser Ser Glu Ala Leu Ser Gln Tyr Lys Met Asn Ile Thr Phe Ile Ala 185 180 190 Pro Leu Leu Glu Lys Leu Ala Lys Thr Ser Asp Xaa . 195 . 200 <210> 1213 <211> 85 <212> PRT <213> Homo sapiens <220>. <221> SITE · <222> (15) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1213 Glu Leu His Lys Pro Phe Glu Tyr Leu Ile Gln Asp Asn Gly Xaa Val 5 1 10 15 Leu Leu Gln Asn Asn Val Tyr Val Cys Met Tyr Ile Trp Phe Ser 20 25 30 Ile Tyr Ile Lys Gly Leu Asp Glu Pro Pro Lys Asn Trp Leu Arg Thr 35 40 45 Leu Gln Trp Asn Leu Gln Ala Ser Ile Cys Lys Ser Ala Arg His Lys 50 55 60 • Thr Thr Cys Ser Leu Arg Ala Lys Arg Met Arg Phe Ser Gln Ile Leu 65 70 75 80 Ile Ile Leu Asn Val 85 <210> 1214 <211> 289 <212> PRT <213> Homo sapiens <400> 1214 Met Ala Ala Leu Ala Tyr Asn Leu Gly Lys Arg Glu Ile Asn His Tyr 1 5 10 15 Phe Ser Val Arg Ser Ala Lys Val Leu Ala Leu Val Ala Val Leu Leu 20 25 . 30 Leu Ala Ala Cys His Leu Ala Ser Arg Arg Tyr Arg Gly Asn Asp Ser 35 40 45 Cys. Glu Tyr Leu Leu Ser Ser Gly Arg Phe Leu Gly Glu Lys Val Trp 50 55 • 60 Gln Pro His Ser Cys Met Met His Lys Tyr Lys Ile Ser Glu Ala Lys 65 70 75 . 80

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Asn	Cys	Leu	Val	Asp 85	Lys	His	Ile	Ala	Phe 90	Ile	Gly	Asp	Ser	Arg 95	Ile
Arg	Gln	Leu	Phe 100	Tyr	Ser	Phe	Val	Lys 105	Ile	Ile	Asn	Pro	Gln 110	Phe	Lys
Glu	Glu	Gly 115	Asn	Lys	His	Glu	Asn 120	Ile	Pro	Phe	Glu	Asp 125	Lys	Thr	Ala
Ser	Val 130	Lys	Val	Asp	Phe	Leu 135	Trp	His	Pro	Glu	Val 140	Asn	Gly	Ser	Met
Lys 145	Gln	Cys	Ile	Lys	Val 150	Trp	Thr	Glu	Asp	Ser 155	Ile	Ala	Lys	Pro	His 160
Val	Ile	Val	Ala	Gly 165	Ala	Ala	Thr	Trp <sub>.</sub>	Ser 170	Ile	Lys	Ile	His	Asn 175	Gly .
Ser	Ser	Glu	Ala 180	Leu,	Ser	Gln	Tyr	Lys 185	Met	Asn	lle	Thr	Ser 190	Ile	Ala
Pro	Leu	Leu 195	Glu	Lys :	Leu	Ála	Lys 200	Thr	Ser	Asp		Tyr 205	Trp	Val	Leu
Gln	Asp 210	Pro	Val	Tyr	Glu	Asp 215	Leu	Leu	Ser	Glu	Asn 220	Arg	Lys	Met	Ile
Thr 225	Asn	Glu	Lys	Ile	Asp 230	Ala	Tyr	Asn	Glu	Ala 235		Val	Ser	Ile	Leu 240
Asn	Ser	Ser	Thr	Arg 245	Asn	Ser	Lys	Ser	Asn 250	Val	Lys	Met	Phe	Ser 255	Val
Ser	Lys	Leu	Ile 260	Ala	Gln	Glu	Thr	Ile 265	Met	Glu	Ser	Leu	Asp 270	Gly	Leu
His	Leu	Pro 275	Glu	Ser	Ser	Arg	Glu 280	Thr	Val	Arg	Asn	Phe 285	Tyr	Ile	Cys
Gln				٠		•									

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50 55 60 Phe Lys Val Asn His Met Lys Val Thr Pro Met Asp Ala Ala Thr Ala 65 70 75 80 Ser Leu Leu Asn Val Phe Asn Gly Asn Glu Cys Gly Ala Glu Gly Ser 85 <sup>.</sup> . 90 95 Trp Gln Val Gly Ile Gln Gln Asp Val Thr His Thr Asn Gly Cys Val 100 105 110 Ala Leu Gly Ile Lys Leu Pro His Thr Glu Tyr Glu Ile Phe Lys Met 🗌 115 120 125 Glu Gln Asp Ala Arg Gly Arg Tyr Leu Leu Phe Asn Gly Gln Arg Pro 130 135 140 Ser Asp Gly Ser Ser Pro Asp Arg Pro Glu Lys Arg Ala Thr Ser Tyr 145 150 155 160 Gln Met Pro Leu Val Gln Cys Ala Ser Ser Ser Pro Arg Ala Glu Asp 165 170 175 Leu Ala Glu Asp Ser Gly Ser Ser Leu Tyr Gly Arg Ala Pro Gly Arg 180 . 185 190 His Thr Trp Ser Leu Leu Leu Ala Ala Leu Ala Cys Leu Val Pro Leu 195 200 205 Leu His Trp Asn Ile Arg Arg 210 . 215 <210> 1216 <21:1> 466 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (268) <223> Xaa equals any of the naturally occurring L-amino acids *i* 1 <220> <221> SITE <222> (458) <223> Xaa equals any of the naturally occurring L-amino acids · . <220> <221> SITE <222> (460) . <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE . <222> (461) <223> Xaa equals any of the naturally occurring L-amino acids <220>

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Glu Val Le 305	ı Phe	Leu	Thr 310	Arg	His	Phe	Ile	Phe 315	His	Asp	Asn	Asn	Asn 320
Thr Trp Gl	ı Gly	His 325	Tyr	Tyr	His	Tyr	Ser 330	Asp	Pro	Val	Cys	Lys 335	His
Pro Thr Ph	e Ser 340	Ile	Tyr	Ala	Arg	Gly 345	Arg	Tyr	Ser	Arg	Gly 350	Val	Leu
Ser Ser Ar 35	y Val	Met	Gly	Gly	Thr 360	Glu	Phe	Val	Phe	Lys 365	Val	Asn	His .
Met Lys Va 370	. Thr	Pro	Met	Asp 375	Ala	Ala	Thr	Ala	Ser 380	Leu	Leu	Asn	Val
Phe Asn Gly 385		•	390				•	395				•	40 <b>0</b>
Gln Gln Asp		405					410					415	
Leu Pro His	420					425				•	430		
Gly Arg Ty 43					440					445			
Pro Asp Arg 450	Pro.	Arg	Arg	Lys 455	Lys	Gly	Xaa	Lys	Xaa 460	Xaa	ŗ ŗ	Xaa	Ala
Pro Pro 465										,	۲,		
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465 <210> 1217 <211> 514 <212> PRT			•		·			, , , <i>,</i>		,	<b>,</b>		
465 <210> 1217 <211> 514 <212> PRT <213> Homo	sapie	ns	•					· · · · · · · · · · · · · · · · · · ·			<b>,</b>		
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	Phe-	Tyr	His	Asn 100	Asn	Thr	Phe	Lys	Ala 105	Tyr	Gln	Phe	Tyr	Tyr 110	Gly	Ser
	Asn	Arg	Cys 115	Thr	Asn	Pro	Thr	Tyr 120	Thr	Leu	Ile	Ile	Arg 125	Gly	Lys	Ile
	Arg	Leu 130	Arg	Gln	Ala	Ser	Trp 135	Ile	Ile	Arg	Gly	Gly 140	Thr	Glu	Ala	Asp
	Tyr 145	Gln	Leu	His	Asn	Val 150	Gln	Val	Ile	Cys	His 155	Thr	Glu	Ala	Val	Ala 160
	Glu	Lys	Leu	Gly	Gln 165	Gln	Val	Asn	Arg	Thr 170	Cys	Pro	Gly	Phe	Leu 175	Ala
	Ąsp -	Gly	Gly	Pro 180	Trp	Val	Gln	Asp	Val 185	Ala	Tyr	Asp	Leu	Trp 190	Arg	Glu
	Glu	Asn	Gly 195	Суз	Glu	Cys	Thr	Lys 200		Val	Asn	Phe	Ala 205	Met	His	Glu
		210				Val	215					220				
	His 225	Leu	Val	Glu	Glu	Leu 230	Phe	Leu	Gly	Asp	Ile 235	His	Thr	Asp	Ala	Thr 240
1	Gln	Arg	Met	Phe	Tyr 245	Arg	Pro	Ser	Ser	Tyr 250	Gln	Pro	Pro	Leu	Gln 255	Asn
				260		His			265					270		-
			275			Pro		280					285			
		290				Glu	295					300	•			
	305					Thr 310					315					320
					325	Tyr				330					335	
	Pro	Thr	Phe	Ser 340	Ile	Tyr	Ala	Arg	Gly 345	Arg	Tyr	Ser	Arg	Gly 350	Val	Leu
,	Ser	Ser	Arg 355	Val	Met	Gly	Gly	Thr 360	Glu	Phe	Val	Phe	Lys 365	.Val	Asn	His
· 1		Lys 370	Val	Thr	Pro	Met	Asp 375	Ala	Ala	Thr	Ala	Ser 380	Leu	Leu	Asn	Val
	Phe 385	Asn	Gly	Asn	Glu	Cys 390	Gly	Ala	Glu	Gly	Ser 395	Trp	Gln	Val	Gly	Ile 400
	Gln	Gln	Asp	Val	Thr 405	His	Thr	Asn	Gly	Cys 410	Val	Ala	Leu	Gly	Ile 415	Lys

Leu Pro His Thr Glu Tyr Glu Ile Phe Lys Met Glu Gln Asp Ala Arg 420 425 . 430 Gly Arg Tyr Leu Leu Phe Asn Gly Gln Arg Pro Ser Asp Gly Ser Ser 435 440 445 Pro Asp Arg Pro Glu Lys Arg Ala Thr Ser Tyr Gln Met Pro Leu Val 450 . 455 460 Gln Cys Ala Ser Ser Ser Pro Arg Ala Glu Asp Leu Ala Glu Asp Ser 465 470 475 . 480 Gly Ser Ser Leu Tyr Gly Arg Ala Pro Gly Arg His Thr Trp Ser Leu 485 490 495 . Leu Leu Ala Ala Leu Ala Cys Leu Val Pro Leu Leu His Trp Asn Ile 500 505 · 510 . Arg Arg <210> 1218 <211> 36 <212> PRT <213> Homo sapiens <400> 1218 Met Asn Asn Ser Ile Ala Ala Gln Ala Ser Lys Phe Val Ile Leu Tyr 1 5 10 15 Leu Phe Ile Leu Ser Phe Pro Lys Gln Cys Ile Cys His Ile Leu Ser 20 25 30 Glu Met Val Trp 35 <210> 1219 <211> 101 <212> PRT <213> Homo sapiens <400> 1219 Gln Ala Ser Lys Ser Leu Leu Pro His Gly Ile His Thr Ile Leu Asn 5 1 10 15 Val Ile Tyr Ile Asn Leu Thr Ser Val Gly Ile Met Thr Met Cys Met 20 . 25 30 Lys Cys Asn Leu Pro Lys Lys Phe Leu Arg Asp Ser Val Ser Lys Val 35 . 40 45 . Leu Ile Asp Ser Trp Ser His Arg Tyr Leu Leu Thr Ser Met Tyr Gln 50 55 60

Tyr Ser Arg Leu Ser Glu Glu Lys Gln Val Ile Ser Ile Tyr Cys Ile

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65 70 75 80 Ile Tyr Thr Asn Asn Leu Gly Thr Leu Lys Asp Ser Tyr Gln Leu Gly 85 90 95 Trp Trp Glu Pro Ser : 100 <210> 1220 <211> 178 <212> PRT <213> Homo sapiens <400> 1220 His Leu Leu Glu Val Thr Pro Cys Arg Leu Pro Val Pro Glu Phe Pro 1 5 · 10 15 Gly Arg Thr Pro Arg Gly Ser Arg Thr Pro Asp Met Arg Arg Leu Leu 20 25 30 Leu Val Thr Ser Leu Val Val Val Leu Leu Trp Glu Ala Gly Ala Val 35 40 45 Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val Lys His Trp Pro Ser 50 55 60 Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg Val Val Glu Pro Pro 65 . 70 75 80 Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro Val Gln Lys Pro Lys 85 90 1 95 Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Gln Gly Arg Gly Pro Ile 100 105 . 110 Leu Pro Gly Thr Lys Ala Trp Met Glu Thr Glu Asp Thr Leu Gly Arg 115 120 -125 Val Leu Ser Pro Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro Pro 130 135 140 Glu Glu Asp Gln Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro Asn 145 150 155 160 . His Gln Val Leu Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr His 170 175

Pro Gln

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<400> 1221

WO 01/77137 PCT/US01/11988 Met Asn Asn Ser Ile Ala Ala Gln Ala Ser Lys Phe Val Ile Leu Tyr 1 5 10 15 Leu Phe Ile Leu Ser Phe Pro Lys Gln Cys Ile Cys His Ile Leu Val 25 20 30 Arg Trp Ser Gly Lys Ser His Phe 35 40 <210> 1222 <211> 39 <212> PRT <213> Homo sapiens <400> 1222 Met Met Gln Val Pro Asp Leu Glu Leu Gly Leu Leu Ala Thr Phe 1 5 10 15 Leu Leu His Leu Leu Asp Ala Leu Pro Met Leu Leu Ser Leu Gln Ser 20 25 30 . Cys Arg Glu Pro Thr Ser Ser 35 <210> 1223 <211> 54 <212> PRT <213> Homo sapiens <400> 1223 Gly Thr Leu Gln Arg Gly Phe Leu Leu Cys Ser Leu Val Pro Gly Trp 1 . 5 10 15 Gly Trp Gly Thr Pro Ala Ala Leu Thr Asp Gly Ser Pro Phe Ser Leu 20 25 30 Ser Gly His Pro Ser Pro Thr Leu Thr Cys Thr Lys Phe Ser Pro Gln 35 40 45 Leu Leu Cys Val Ala Pro 50 <210> 1224 <211> 39 <212> PRT <213> Homo sapiens <400> 1224 Met Met Gln Val Pro Asp Leu Glu Leu Gly Leu Leu Leu Ala Thr Phe 1 5 . 10· 15 Leu Leu His Leu Leu Asp Ala Leu Pro Met Leu Leu Ser Leu Gln Ser · 20 25 30 .

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Cys Arg Glu Pro Thr Ser Ser 35 <210> 1225 <211> 167 <212> PRT . <213>. Homo sapiens <220> <221> SITE <222> (165) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1225 Met Ser Leu Tyr Leu Cys Val Ser Leu Leu Ile Ser Leu Ser Leu Ser . 5 10 15 1. Leu Asn Val Ser Val Ser Val Ser Leu Arg Leu Cys Leu Tyr Phe Ser 25 30 20 Pro Pro Leu Ser Asp Ala Ile Ser Leu Cys Leu Ser Leu Ser Leu Ser 40 .45 35 Val Ser Pro Phe Leu Ser Pro Ser Leu Ala Leu Cys Phe Leu Cys Leu 55 60 50 Cys Leu Phe Leu Ala Gln Ser Arg Ala Leu Gly Met Arg Thr Arg Val 80 75 65 70 Ser Gln Gly Trp Leu Gln Leu Asp Thr Ser Gly Ile Pro Ala Ser Pro 85 90 95 Gly Pro Ser Lys Gly Glu Arg Tyr Val Thr Phe Gly Val Val Gly Gly 100 105 110 Ala Gly Ser Asn Leu Ala Val His Ser Ala Arg Pro Leu Ile Gly Asn 115 120 125 Leu Leu Ser Val Gly Pro Thr Ser Thr Leu Thr Pro Thr Arg Gly Leu 130 135 140 Ser Trp Gln Ser Ile Ala Ala Ser Pro Ser Ser Thr Gly His Ala Lys 150 155 160 145 • Phe Arg Glu Thr Xaa Lys Asn 165

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<220> <221> SITE <222> (60) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1226 Gln Leu Arg Xaa Leu Arg Asp Ser Ile Pro Glu Gln Phe Cys Asn Arg 15 1 5 10 Leu Lys Ala Pro Gly Asn Arg Thr His Ile Ser Gly Cys Leu Gly Gly 30 25 20 Gly Gln Asp Leu Gly Gly Pro Glu Arg Val Phe Trp Asp Asp Gly Ile · 45 40 35 Phe Cys Ile Leu Thr Val Trp Cys Leu His Arg Xaa Gln His Leu Ser 50 55 60 Glu Ile Asn Gly Leu Ser Leu 70 65 <210> 1227 <211> 114 <212> PRT <213> Homo sapiens <400> 1227 Met Ser Leu Tyr Leu Cys Val Ser Leu Leu Ile Ser Leu Ser Leu Ser 15 1 5 10 -Leu Asn Val Ser Val Ser Val Ser Leu Arg Leu Cys Leu Tyr Phe Ser 30 20 25 Pro Pro Leu Ser Asp Ala Ile Ser Leu Cys Leu Ser Leu Ser Leu Ser 45 35 40 Val Ser Pro Phe Leu Ser Pro Ser Leu Ala Leu Cys Phe Leu Cys Leu 55 60 50 Cys Leu Phe Leu Ala Gln Ser Arg Ala Leu Gly Met Arg Thr Arg Val 75 . 80 65 70 Ser Gln Gly Trp Leu Gln Leu Asp Thr Ser Gly Ile Pro Ala Ser Pro 85 90 95 Gly Pro Ser Lys Gly Glu Arg Tyr Val Tyr Phe Arg Gly Gly Arg Gly 105 , 110 100 Cys Gly

<210> 1228 <211> 123 <212> PRT <213> Homo sapiens

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<220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1228 Met Ala Ala Leu Xaa Thr Val Leu Phe Thr Gly Val Arg Arg Leu His 1 5 10 . 15 Cys Ser Ala Ala Ala Trp Ala Gly Gly Gln Trp Arg Leu Gln Gln Gly 25 20 30 Leu Ala Ala Asn Pro Ser Gly Tyr Gly Pro Leu Thr Glu Leu Pro Asp 40 . 45 35 Trp Ser Tyr Ala Asp Gly Arg Pro Ala Pro Pro Met Lys Gly Gln Leu 55 60 Arg Arg Lys Ala Glu Arg Glu Thr Phe Ala Arg Arg Val Val Leu Leu 70 75 65 80 Ser Gln Glu Met Asp Ala Gly Leu Gln Ala Trp Gln Leu Arg Gln Gln 85 . 90 95 Lys Leu Gln Glu Glu Gln Arg Lys Gln Glu Asn Ala Leu Lys Pro Lys 105 100 110 Gly Ala Ser Leu Lys Ser Pro Leu Pro Ser Gln 120 115 <210> 1229 <211> 123 <212> PRT <213> Homo sapiens <400> 1229 Met Ala Ala Leu Val Thr Val Leu Phe Thr Gly Val Arg Arg Leu His 5 10 1 15 Cys Ser Ala Ala Ala Trp Ala Gly Gly Gln Trp Arg Leu Gln Gln Gly 20 25 30 Leu Ala Ala Asn Pro Ser Gly Tyr Gly Pro Leu Thr Glu Leu Pro Asp 35 40 45 Trp Ser Tyr Ala Asp Gly Arg Pro Ala Pro Pro Met Lys Gly Gln Leu 60 50 55 Arg Arg Lys Ala Glu Arg Glu Thr Phe Ala Arg Arg Val Val Leu Leu 70 75 80 . 65 . Ser Gln Glu Met Asp Ala Gly Leu Gln Ala Trp Gln Leu Arg Gln Gln 85 90 95 Lys Leu Gln Glu Glu Gln Arg Lys Gln Glu Asn Ala Leu Lys Pro Lys 100 105 ' · · 110

691

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Gly Ala Ser Leu Lys Ser Pro Leu Pro Ser Gln 115 120

<210> 1230 <211> 128 <212> PRT. <213> Homo sapiens <400> 1230 Met Gly Ser Ala Pro Trp Ala Pro Val Leu Leu Ala Leu Gly Leu 5 10 1 . 15 Arg Gly Leu Gln Ala Gly Ala Arg Arg Ala Pro Asp Pro Gly Phe Gln 25 20 30 Glu Arg Phe Phe Gln Gln Arg Leu Asp His Phe Asn Phe Glu Arg Phe 35 40 . 45 Gly Asn Lys Thr Phe Pro Gln Arg Phe Leu Val Ser Asp Arg Phe Trp 50 55 - 60 Val Arg Gly Glu Gly Pro Ile Phe Phe Tyr Thr Gly Asn Glu Gly Asp 65 70 75 80 Val Trp Ala Phe Ala Asn Asn Ser Ala Phe Val Ala Glu Leu Ala Ala 85 90 95 Glu Arg Gly Ala Leu Leu Val Phe Ala Glu His Arg Tyr Tyr Gly Lys 100 105 110 Ser Leu Pro Phe Gly Ala Gln Ser Thr Gln Arg Gly Thr Arg Ser Cys 115 120 125

<210> 1231 <211> 492 <212> PRT <213> Homo sapiens

<400> 1231 Met Gly Ser Ala Pro Trp Ala Pro Val Leu Leu Leu Ala Leu Gly Leu 5 \_ 10 15 1 Arg Gly Leu Gln Ala Gly Ala Arg Arg Ala.Pro Asp Pro Gly Phe Gln 20 25 30 Glu Arg Phe Phe Gln Gln Arg Leu Asp His Phe Asn Phe Glu Arg Phe 35 40 45 Gly Asn Lys Thr Phe Pro Gln Arg Phe Leu Val Ser Asp Arg Phe Trp 50 55 -60 Val Arg Gly Glu Gly Pro Ile Phe Phe Tyr Thr Gly Asn Glu Gly Asp 70 65 75 80

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Val Trp Ala Phe Ala Asn Asn Ser Ala Phe Val Ala Glu Leu Ala Ala $\frac{90}{90}$ Glu Arg Gly Ala Leu Leu Val Phe Ala Glu His Arg Tyr Tyr Gly Lys $\frac{100}{100}$ Ser Leu Pro Phe Gly Ala Gln Ser Thr Gln Arg Gly His Thr Glu Leu $\frac{125}{110}$ Leu Thr Val Glu Gln Ala Leu Ala Asp Phe Ala Clu Leu Leu Arg Ala $\frac{135}{140}$ Ser Tyr Gly Gly Met Leu Ala Asp Phe Ala Clu Leu Leu Arg Ala $\frac{135}{140}$ Ser Tyr Gly Gly Met Leu Ser Ala Tyr Leu Arg Met Lys Tyr Pro $\frac{176}{175}$ His Leu Val Ala Gly Ala Clu Fyr Leu Arg Arg Asp Leu Gly Ala Leu Ala Asp Phe Ala Pro Val Leu Ala Val $\frac{180}{195}$ Ser Tyr Gly Gly Met Leu Ser Ala Tyr Leu Arg Met Lys Tyr Pro $\frac{176}{175}$ His Leu Val Ala Gly Ala Leu Ala Ala Ser Ala Pro Val Leu Ala Val $\frac{180}{195}$ Ala Gly Leu Gly Asp Ser Asn Gln Phe Phe Arg Asp Val Thr Ala Asp $\frac{220}{200}$ Arg Gln Ile Lys Asp Leu Phe Leu Gln Gly Ala Tyr Asp Thr Val Arg $\frac{221}{220}$ Trp Glu Phe Gly Thr Cys Gln Pro Leu Ser Asp Glu Lys Asp Leu Thr $\frac{240}{210}$ Trp Glu Phe Gly Thr Cys Gln Pro Leu Ser Asp Glu Lys Asp Leu Thr $\frac{255}{200}$ Ser Tyr Pro Tyr Pro Thr Asp Phe Leu Gly Pro Leu Pro Ala Asn Pro $\frac{275}{200}$ Val Cys Asp Arg Leu Leu Ser Glu Ala Cln Arg Ile Thr $\frac{290}{310}$ Sign Ser Tyr Asp Thr Val Arg $\frac{210}{315}$ Sign Ser Asp Arg Leu Thr $\frac{255}{200}$ Ser Clu Lys Asp Leu Thr $\frac{255}{200}$ Sign Try Pro Tyr Pro Thr Asp Phe Leu Gly Pro Leu Pro Ala Asn Pro $\frac{275}{200}$ Sign Ser Asp Arg Leu Chy Pro Leu Pro Ala Asn Pro $\frac{215}{310}$ Sign Sign Sign Sign Sign Sign Sign Sign	-																	
100105110Ser LeuProPheGlyAlaGlnSerThrGlnArgGlyHisThrGluLeu130GluGluAlaLeuAlaAspPheAlaGluLeuArgAla130GluGluGluAlaLeuAlaAspPheAlaGluLeuArgAla130GluGluGlyAlaCluAspPheAlaGluLeuArgAla145TyrGlyGlyGlyMetLeuSerAlaProAlaProAlaValIeuAlaVal145LeuValAlaGlyAlaLeuAlaAlaSerAlaProAlaValIeuAlaVal145LeuValAlaGlyAlaLeuAlaAlaSerAlaProIaValValValValValValValArgIeuAlaValIeuAlaValValValValArgIeuAlaAsp205ThrAlaAsp240Z40Z40Z40Z20Z20Z20Z20Z40Z40Z40Z40Z40Z40Z40Z40Z40Z40Z40Z40Z40Z45Z45Z45Z40Z40Z40Z40Z40Z40Z40Z40Z40Z40 <th></th> <td>Val</td> <td>Trp</td> <td>Ala</td> <td>Phe</td> <td></td> <td>Asn</td> <td>Asn</td> <td>Ser</td> <td>Ala</td> <td></td> <td>Val</td> <td>Ala</td> <td>Glu</td> <td>Leu</td> <td></td> <td>Ala</td> <td></td>		Val	Trp	Ala	Phe		Asn	Asn	Ser	Ala		Val	Ala	Glu	Leu		Ala	
115120125Leu Thr Val Glu Gln Ala Leu Ala Asp Phe Ala Glu Leu Leu Arg Ala 130Glu Asp Asp Leu Gly Ala Gln Asp Ala Pro Ala Ile Ala Phe Gly 150Glu Ser Tyr Gly Gly Met Leu Ser Ala Tyr Leu Arg Met Lys Tyr Pro 165Gly Ser Tyr Gly Gly Ala Glu Ala Leu Ala Ala Ser Ala Pro Val Leu Ala Val 160Gly Leu Cly Asp Ser Asn Gln Phe Phe Arg Asp Val Thr Ala Asp 200Yer Val Clu Ala Val 190Ala Gly Leu Cly Asp Ser Asn Gln Phe Phe Arg Asp Val Thr Ala Asp 205Phe Glu Gly Gln Ser Pro Lys Cys Thr Gln Gly Val Arg Glu Ala Phe 215Yer Asp Thr Val Arg 225Arg Gln Ile Lys Asp Leu Phe Leu Gln Gly Ala Tyr Asp Thr Val Arg 240Phe Gly Thr Cys Gln Pro Leu Ser Asp Glu Lys Asp Leu Thr 250Ser Asp Glu Lys Asp Leu Thr 255Gln Leu Phe Met Phe Ala Arg Asn Ala Phe Thr Val Leu Ala Met Met 260Pro Thr Asp Phe Leu Gly Pro Leu Pro Ala Asp Pro 285Val Lys Val Gly Cys Asp Arg Leu Leu Ser Glu Ala Gln Arg Ile Thr 290Phe Gly Leu Arg Ala Leu Ala Gly Leu Val Tyr Asn Ala Ser Gly Ser Glu 315Gly Leu Arg Ala Leu Ala Gly Leu Val Tyr Asn Ala Ser Gly Ser Glu 325Ser Cys Ala Asp Pro Thr 335Gly Cys Gly Thr Gly Pro Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys 340Ser Asp Asp Asp Leu Thr Asp Met Phe 360Gly Cys Gly Thr Gly Pro Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys 340Ser Asp Asp Asp Asp Asp Asp Asp Asp Asp Asp		Glu	Arg	Gly		Leu	Leu	Val	Phe		Glu	His	Arg	Tyr		Gly	Lys	
130135140LeuArgGlyMetLeuSerAlaTyrLeuArgArgArgGlyAlaLeuAlaAlaSerAlaProValLeuAlaValAlaGlyLeuGlyArgSerArgGlnProLysArgCluAlaArgPheGluGlyGlnSerProLysCysThrGlnGluAlaPro225CluSerProLeuGluArgCluArgCluArgArgArgArgArgArgGlnIteLysAspLeuProLeuGluArg<		Ser	Leu		Phe	Gly	Ala	Gln		Thr	Gln	Arg	Gly		Thr	Glu	Leu	
145       150       155       160         Gly Ser Tyr Gly Gly Met Leu Ser Ala Tyr Leu Arg Met Lys Tyr Pro       175       175         His Leu Val Ala Gly Ala Gly Ala Leu Ala Ala Ser Ala Pro Val Leu Ala Val       180       Val 180       Val Ala Val         Ala Gly Leu Gly Asp Ser Asn Gln Phe Phe Arg Asp Val Thr Ala Asp       200       Phe Arg Asp Val Thr Ala Asp       205         Phe Glu Gly Gln Ser Pro Lys Cys Thr Gln Gly Val Arg Glu Ala Phe       210       230       Phe Val 235       75       Val Arg 240         Trp Glu Phe Gly Thr Cys Asp Leu Phe Leu Gln Gly Ala Tyr Asp Thr Val Arg       240       75       76       74       240         Trp Glu Phe Gly Thr Cys Gln Pro Leu Ser Asp Glu Lys Asp Leu Thr       255       76       76       77       70         Asp 7275       Tyr Pro Thr Asp Phe Leu Gly Pro Leu Pro Ala Asp 255       76       76       76       77       70         Asp 7275       Tyr Pro Thr Asp Phe Leu Gly Pro Leu Pro Ala Asp 265       76       76       76       76       77         Asp 7275       Tyr Pro Thr Asp Phe Leu Cly Pro Leu Pro Ala Asp 7270       70       70       70       70       70         Asp 7275       Tyr Pro Thr Asp Phe Leu Cly Pro Leu Pro Ala Asp 7270       70       70       70       70       70         Asp 7270       Tyr Pro		Leu		Val	Glu	Gln	Ala		Ala	Asp	Phe	Ala		Leu	Leu	Arg	Ala	
165170175HisLeuValAlaGlyAlaLeuAlaAlaSerAlaProValLeuAlaValAlaGlyLeuGlyAspSerAsnGlnPhePheArgAspValThrAlaAsp210GluGlnSerProLysCysThrGlnGlyValArgGluAlaPhe210GlnItLysAspLeuProLusGlyValArgGluAlaPhe210GlnItLysAspLeuProLusArgGluAlaPhe210GlnItLysAspLeuProGluAlaArg240ArgGlnItLysAspLeuProLusAsp240ArgGluPheGlyThrCysGlnProLeuSerAspThrValArg225GlnPheLeuGlnProLeuSerAspCysThrZ40Z55GlnLeuPheMetProLeuSerAspGluLeuAspZ55GlnLeuPheAlaArgAsnAsnArgZ55Z50Z50Z50Z50Z50AspTyrProTyrAspArgLeuAspArgZ55Z50 </th <th></th> <th></th> <th>Arg</th> <th>Arg</th> <th>Asp</th> <th>Leu</th> <th></th> <th>Ala</th> <th>Gln</th> <th>Asp</th> <th>Ala</th> <th></th> <th>Ala</th> <th>Ile</th> <th>Ala</th> <th>Phe</th> <th></th> <th></th>			Arg	Arg	Asp	Leu		Ala	Gln	Asp	Ala		Ala	Ile	Ala	Phe		
180       185       190         Ala       Gly       Leu       Gly       Asp       Ser       Asn       Gln       Phe       Phe       And       Gly       Gly       Gln       Ser       Pro $200$ Phe       Phe       Ang       Asp       Zab       Thr       Ala       Asp         Phe       Glu       Gly       Gln       Ser       Pro $215$ Cys       Thr       Gln       Gly       Val       Arg       Glu       Ala       Asp         225       Gl       Ite       Lys       Asp       Leu       Pro       Leu       Str       Gln       Gly       Ala       Pro       Zab         Arg       Gln       Leu       Pro       Cys       Gln       Pro       Leu       Str       Zab       Pro       Ite       Zab       Pro       Ite       Zab       Pro       Zab       Zab       Pro       Zab       Zab       Pro       Zab       <				-		165					170					175		
195       200       205         Phe       Glu       Gly       Gln       Ser       Pro       Lys       Cys       Thr       Gln       Gly       Val       Arg       Glu       Ala       Phe         Arg       Gln       Ile       Lys       Asp       Leu       Phe       Leu       Gln       Gly       Ala       Tyr       Asp       Thr       Val       Arg       Glu       Ala       Phe         225       Gl       Ile       Lys       Asp       Leu       Phe       Leu       Gln       Gly       Ala       Tyr       Asp       Thr       Val       Arg       240         Trp       Glu       Phe       Gly       Thr       Cys       Gln       Pro       Leu       Ser       Asp       Glu       Lys       Asp       Leu       Tyr       Asp       Leu       Thr       240         Arg       Glu       Phe       Glu       Thr       Cys       Gln       Pro       Lus       Asp       Leu       Asp       Leu       Asp       Leu       Asp       Leu       Asp       Pro       Zro       Nr       Pro       Zro       Zro       Zro       Zro       Zr					180	-				185					190			
210       215       220         Arg Gln Ile Lys Asp Leu Phe Leu Gln Gly Ala Tyr Asp Thr Val Arg 240         Trp Glu Phe Gly Thr Cys Gln Pro Leu Ser Asp Glu Lys Asp Leu Thr 250         Gln Leu Phe Met Phe Ala Arg Asn Ala Phe Thr Val Leu Ala Met Met 260         Asp Tyr Pro Tyr Pro Thr Asp Phe Leu Cly Pro Leu Pro Ala Asp Pro 275         Val Lys Val Gly Cys Asp Arg Leu Leu Ser Glu Ala Gln Arg Ile Thr 290         Gly Leu Arg Ala Leu Ala Gly Leu Val Tyr Asn Ala Ser Gly Ser Glu 310         Gly Leu Arg Ala Leu Ala Gly Leu Val Tyr Asn Ala Ser Gly Ser Glu 320         His Cys Tyr Asp Ile Tyr Arg Leu Tyr His Ser Cys Ala Asp Pro Thr 335         Gly Cys Gly Thr Gly Pro Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys 340         Thr Glu Ile Asn Leu Pro Pro Asp Ala Ser Asp Asp Asp Asp Asp Asp Asp Asp Arg Leu Tyr Asp Ala Ser Gly Ser Glu 320         His Cys Tyr Asp Ile Tyr Arg Leu Tyr His Ser Cys Ala Asp Pro Thr 335         Flip Cys Gly Thr Gly Pro Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys 340         Thr Glu Ile Asn Leu Pro Pro Asp Ala Ser Asp Asp Asp Asp Asp Asp Asp Asp Asp Asp			•	195					200					205				
225230235240Trp Glu Phe Gly Thr 245Cys Gln Pro Leu Ser Asp Glu Lys Asp Leu Thr 255ThrGln Leu Phe Met Phe Ala Arg Asn Ala Phe Thr Val Leu Ala Met Met 260Pro Tyr Asp Phe Ala Arg Asn Ala Phe Thr Val Leu Ala Met Met 270Asp Tyr Pro Tyr Pro Tyr Pro Thr Asp Phe Leu Gly Pro Leu Pro Ala Asn Pro 280Pro Leu Pro Ala Asn Pro 285Val Lys Val Gly Cys Asp Arg Leu Leu Ser Glu Ala Gln Arg Ile Thr 290Pro Asp Arg Ala Cly Leu Val Tyr Asn Ala Ser Cly Ser Glu 320His Cys Tyr Asp Ile Tyr Arg Leu Tyr His Ser Cys Ala Asp Pro Thr 335Pro Thr 335Gly Cys Gly Thr Gly Pro Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys 340Pro Asp Ala Ser Asn Asn Val Thr Asp Met Phe 360Fro Asp Leu Pro Pro Pro Thr Asp Glu Leu Arg Gln Arg Tyr Cys Leu Asp 370Pro Asp Cys Glu Pro Pro Pro Thr 375			210	_				215					220					
245250255Gln Leu Phe Met 260Phe Ala Arg Asn Ala 265Phe Thr Val Leu Ala Met Met 270Asp Tyr Pro Tyr Pro Tyr Pro Thr Asp Phe Leu Gly Pro Leu Pro Ala Asn Pro 285Val Lys Val Gly Cys Asp Arg Leu Leu Ser Glu Ala Gln Arg Ile Thr 300Gly Leu Arg Ala Leu Ala Gly Leu Val Tyr Asn Ala Ser Gly Ser Glu 320His Cys Tyr Asp Ile Tyr Arg Leu Tyr His 325Gly Cys Gly Thr Gly Pro Asp Ala Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys 340Thr Glu Ile Asn Leu Thr Phe Ala Ser Asn Asn Val Thr Asp Met Phe 355Pro Asp Leu Pro Phe Thr Asp Glu Leu Arg Gln Arg Tyr Cys Leu Asp 370		225			_	_	230					235					240	
260       265       270         Asp       Tyr       Pro       Tyr       Pro       Thr       Asp       Phe       Leu       Gly       Pro       Leu       Pro       285       Ala       Asn       Pro         Val       Lys       Val       Gly       Gly       Cys       Asp       Arg       Leu       Ser       Glu       Ala       Gln       Arg       Ile       Thr         Gly       Leu       Arg       Ala       Cys       Asp       Arg       Leu       Ser       Glu       Ala       Glu       Ala       Ser       Glu       Ser       Glu       Asp       Arg       Ile       Thr         305       Leu       Arg       Ala       Leu       Ala       Gly       Leu       Val       Tyr       Asp       Ala       Ser       Glu       Ser       Gly       Ser       Gly       Ser       Gly       Ser       Gly       Ser       Gly       Ser       Gly       Ser		÷		•	4	245					250					255		
275280285ValLysValGlyCysAspArgLeuLeuSerGluAlaGlnArgIleThrGlyLeuArgAlaLeuAlaGlyLeuValTyrAsnAlaSerGlySerGlu305LeuArgAlaLeuAlaGlyLeuValTyrAsnAlaSerGlySerGlu305TyrAspIleTyrArgLeuValTyrAsnAlaSerGlySerGlu305TyrAspIleTyrArgLeuTyrHisSerCysAlaAspProThr305GlyTyrAspIleTyrArgLeuTyrHisSerCysAlaAspProThr305GlyTyrAspIleTyrArgLeuTyrHisSerCysAlaAspPro305GlyThrGlyProAspAlaArgAlaTrpAspTyrGlnAlaCysGlyCysGlyThrGlyProAspAlaSerAsnAsnValThrAspMetPhe300ThrGlyFroFroAspGlyAsnAsnAsnAsnValThrAspAsp70AspLeu					260			_		265					270			
290295300Gly Leu Arg AlaLeu Ala Gly Leu Val Tyr Asn Ala Ser Gly Ser Glu 310Sof Ser Gly Ser Glu 315Ser Gly Ser Gly Ser Glu 320His Cys Tyr Asp IleTyr Arg Leu Tyr His 325Ser Cys Ala Asp Pro 330Thr 335Gly Cys Gly Thr Gly Pro Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys 340Gly Asp Leu Thr Phe Ala Ser Asn Asn Val Thr Asp Met Phe 360Ser Asn Asn Val Thr Asp Met Phe 365Pro Asp Leu Pro Phe Thr Asp Glu Leu Arg Gln Arg Tyr Cys Leu Asp 370Ser Cys Leu Asp 380Ser Cys Ala Asp				275					280					285				
305310315320His Cys Tyr Asp IIe 325Tyr Arg Leu Tyr His 325Ser Cys Ala Asp Pro 330Thr 335Thr 335Gly Cys Gly Thr 340Gly Pro 340Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys 345Ala Cys 355Thr Asp Met Phe 360Thr Glu IIe 355Asn Leu Thr Phe Ala Ser Asn Asn Val Thr Asp Met Phe 360Pro 380Asp Leu Asp 380Fyr Cys Leu Asp 380			290		•			295					300			_	•	
325330335Gly CysGly Thr Gly Pro Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys 340Gly Asp Ala Arg Ala Trp Asp Tyr Gln Ala Cys 345Thr Glu Ala Cys 350Thr Glu Ile Asn Leu Thr Phe Ala Ser Asn Asn Val Thr Asp Met Phe 355Ser Asn Asn Val Thr Asp Met Phe 360Ser Asn Asn Val Thr Asp Met Phe 365Pro Asp Leu Pro Phe Thr Asp Glu Leu Arg Gln Arg Tyr Cys Leu Asp 370375330		305	•				310					315		•••			320	
340345350Thr Glu Ile Asn Leu Thr Phe Ala Ser Asn Asn Val Thr Asp Met Phe 355Ser Asn Asn Val Thr Asp Met Phe 360Ser Asn Asn Val Thr Asp Met Phe 365Pro Asp Leu Pro Phe Thr Asp Glu Leu Arg Gln Arg Tyr Cys Leu Asp 370375Ser Asn Asn Val Thr Asp Met Phe 365			-	-	-	325					330				·	335		
355360365Pro Asp Leu Pro Phe Thr Asp Glu Leu Arg Gln Arg Tyr Cys Leu Asp 370375380					340					345					350			
370 375 380				355					360					365				
Thr Trp Gly Val Trp Pro Arg Pro Asp Trp Leu Leu Thr Ser Phe Trp			370					375	•				38,0	•				
385 390 395 400 693				Gly	Val				Pro					Thr	Ser	Phe		

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Gly Gly Asp Leu Arg Ala Ala Ser Asn Ile Ile Phe Ser Asn Gly Asn 405 410 415 Leu Asp Pro Trp Ala Gly Gly Gly Ile Arg Arg Asn Leu Ser Ala Ser 420 425 430 Val Ile Ala Val Thr Ile Gln Gly Gly Ala His His Leu Asp Leu Arg 435 440 445 Ala Ser His Pro Glu Asp Pro Ala Ser Val Val Glu Ala Arg Lys Leu 450 455 460 . Glu Ala Thr Ile Ile Gly Glu Trp Val Lys Ala Ala Arg Arg Glu Gln 470 475 465 480 Gln Pro Ala Leu Arg Gly Gly Pro Arg Leu Ser Leu 485 <sup>·</sup> 490

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	145					150					155					160
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	His	Leu	Val	Ala 180	Gly	Ala	Leu	Ala	Ala 185	Ser	Ala	Pro	Val	Leu 190	Ala	Val
•	Ala	Gly	Leu 195	Gly	Asp	Ser	Asn	Gln 200	Phe	Phe	Arg	Asp	Val 205	Thr	Ala	Asp
	Phe	Glu 210	Gly	Gln	Ser	Pro	Lys 215	Cys	Thr	Gln	Gly	Val 220	Arg	Glu	Ala	Phe
	Arg 225	Gln	İle	Lys	Asp	Leu 230	Phe	Leu	Gln	Gly	Ala 235	Tyr	Asp	Thr	Val	Ar <del>g</del> 240
	Trp	Glu	Phe	Gly	Thr 245	Cys	Gln	Pro	Leu	Ser 250	Asp	Glu	Lys	Asp	Leu 255	Thr
	Gln	Leu	Phe	Met 260	Phe	Ala	Arg	Àsn	Ala 265	Phe	Thr	Val	Leu	Ala 270	Met	Met
	Asp	Tyr	Pro 275	Týr	Pro	Thr	Asp	Phe 280	Leu	Gly	Pro	Leu	Pro 285	Ala	Asn	Pro
	Val	Lys 290	Val	Gly	СУз.	Asp	Arg 295	Leu	Leu	Ser	Glu	Ala 300	Gln	Arg	Ile	Thr
	Gly 305	Leu	Arg	Ala	Leu	Ala 310	Gly	Leu	Val	Tyr	Asn 315	Ala	Ser	Gly	Ser	Glu 320
	His	Cys	Tyr	Asp	Ile 325	Tyr	Arg	Leu	Tyr	His 330	Ser	Cys	Ala	Asp	Pro 335	Thr
	Gly	Cys	Gly	Thr 340	Gly	Pro	Asp	Ala	Arg 345	Ala	Trp	Asp	Tyr	Gln 350	Ala	Cys
	Thr		Ile 355	Asn	Leu	Thr	Phe	Ala 360	Ser	Asn	Asn	Val	Thr 365	Asp	Met	Phe .
	Pro	As <u>p</u> 370	Leu	Pro	Phe	Thr	Asp 375	Glu	Leu	Arg	Gln	Arg 380	Tyr	Cys	Leu	Asp
	Thr 385	Trp	Gly	Val	Trp	Pro 390	Arg	Pro	Asp	Trp	Leu 395	Leu	Thr	Ser	Phe	Trp 400
	Gly	Gly	Asp	Leu	Arg 405		Ala	Ser	Asn	Ile 410	Ile	Phe	Ser	Asn	Gly 415	Asn
				420	Ala				425	•.	-			430		
	•		435		Thr			440					445			
	Ala	Ser 450	His	Pro	Glu	Asp 	Pro 455	Ala	Ser	Val	Val	Glu 460	Ala	Arg	Lys	Leu
-	C111	71-	መከም	TIA	T10	C117	C1	<b>m~~~</b>	17-7	T 1	71-	71-	7	3	<b>01</b>	<u>01</u> -

Glu Ala Thr Ile Ile Gly Glu Trp Val Lys Ala Ala Arg Arg Glu Gln 695

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480

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465 470 475

Gln Pro Ala Leu Arg Gly Gly Pro Arg Leu Ser Leu 485 490

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<210> 1234 <211> 130 <212> PRT <213> Homo sapiens

<400> 1234
Met Phe Leu Glu Leu Ser Gln Ala Leu Leu Leu Gly Leu Pro Arg
1 5 10 15

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Ala Pro Thr Leu Phe Pro Ala Leu Pro Glu Gly Pro Thr Ser Leu Gly Glu Gln Trp Pro Pro Gln Leu Pro Pro His Leu Gly Ala Pro Pro Ala . Ala Glu Gly Ala Val Ala Met Val Gly Cys Gly Glu Gly Arg Gly Gly Lys Pro Leu Cys Cys Ser Pro Ala Gln Ser Pro Ala Gln Arg Val Arg Ser Gly Gly Asp Lys Glu Pro Ile Thr Thr Thr Glu Val Ser Leu Ile Leu Leu His Ser Arg Cys Phe Asn Leu Thr Lys Leu Lys Lys Thr Ala • . Lys Lys <210> 1235 <211> 133 <212> PRT . . <213> Homo sapiens <400> 1235 Met Phe Leu Glu Leu Ser Gln Ala Leu Leu Leu Leu Gly Leu Pro Arg 1 5 Ala Pro Thr Leu Phe Pro Ala Leu Pro Glu Gly Pro Thr Ser Leu Gly · 30 . Glu Gln Trp Pro Pro Gln Leu Pro Pro His Leu Gly Ala Pro Pro Ala Ala Glu Gly Ala Val Ala Met Val Gly Cys Gly Glu Gly Arg Gly Gly Lys Pro Leu Cys Cys Ser Pro Ala Gln Ser Pro Ala Gln Arg Val Arg . Ser Gly Gly Asp Lys Glu Pro Ile Thr Thr Thr Glu Val Ser Leu Ile Leu Leu His Ser Arg Cys Phe Asn Leu Thr Lys Leu Lys Lys Thr Ala · 110 Lys Lys Lys Lys

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Leu Ile Ile Ser Leu Cys Cys Met Val Val Phe Thr Met Ala Tyr Ile Met Leu Cys Arg Lys Thr Ser Gln Gln Glu His Val Tyr Glu Ala Ala Arg Ala His Ala Arg Glu Ala Asn Asp Ser Gly Glu Thr Met Arg Val Ala Ile Phe Ala Ser Gly Cys Ser Ser Asp Glu Pro Thr Ser Gln Asn Leu Gly Asn Asn Tyr Ser Asp Glu Pro Cys Ile Gly Gln Glu Tyr Gln 365 · Ile Ile Ala Gln Ile Asn Gly Asn Tyr Ala Arg Leu Leu Asp Thr Val Pro Leu Asp Tyr Glu Phe Leu Ala Thr Glu Gly Lys Ser Val Cys <210> 1237 <211> 399 <212> PRT <213> Homo sapiens <400> 1237 Met Gly Ile Leu Leu Gly Leu Leu Leu Leu Gly His Leu Thr Val Asp · 5 Thr Tyr Gly Arg Pro Ile Leu Glu Val Pro Glu Ser Val Thr Gly Pro 20 . Trp Lys Gly Asp Val Asn Leu Pro Cys Thr Tyr Asp Pro Leu Gln Gly Tyr Thr Gln Val Leu Val Lys Trp Leu Val Gln Arg Gly Ser Asp Pro Val Thr Ile Phe Leu Arg Asp Ser Ser Gly Asp His Ile Gln Gln Ala • Lys Tyr Gln Gly Arg Leu His Val Ser His Lys Val Pro Gly Asp Val Ser Leu Gln Leu Ser Thr Leu Glu Met Asp Asp Arg Ser His Tyr Thr Cys Glu Val Thr Trp Gln Thr Pro Asp Gly Asn Gln Val Val Arg Asp 115 . · 120 Lys Ile Thr Glu Leu Arg Val Gln Lys Leu Ser Val Ser Lys Pro Thr . 140 Val Thr Thr Gly Ser Gly Tyr Gly Phe Thr Val Pro Gln Gly Met Arg 

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Ile Ser Leu Gln Cys Gln Ala Arg Gly Ser Pro Pro Ile Ser Tyr Ile 165 170 175 Trp Tyr Lys Gln Gln Thr Asn Asn Gln Glu Pro Ile Lys Val Ala Thr 180 185 190 Leu Ser Thr Leu Leu Phe Lys Pro Ala Val Ile Ala Asp Ser Gly Ser 200 195 205 Tyr Phe Cys Thr Ala Lys Gly Gln Val Gly Ser Glu Gln His Ser Asp 210 215 220 . Ile Val Lys Phe Val Val Lys Asp Ser Ser Lys Leu Leu Lys Thr Lys 225 230 235 240 Thr Glu Ala Pro Thr Thr Met Thr Tyr Pro Leu Lys Ala Thr Ser Thr 245 250 , 255 Val Lys Gln Ser Trp Asp Trp Thr Thr Asp Met Asp Gly Tyr Leu Gly . 265 260 270 Glu Thr Ser Ala Gly Pro Gly Lys Ser Leu Pro Val Phe Ala Ile Ile 275 280 285 Leu Ile Ile Ser Leu Cys Cys Met Val Val Phe Thr Met Ala Tyr Ile 290 295 300 Met Leu Cys Arg Lys Thr Ser Gln Gln Glu His Val Tyr Glu Ala Ala 305 310 315 320 Arg Ala His Ala Arg Glu Ala Asn Asp Ser Gly Glu Thr Met Arg Val 325 330 335 Ala Ile Phe Ala Ser Gly Cys Ser Ser Asp Glu Pro Thr Ser Gln Asn 340 345 350 Leu Gly Asn Asn Tyr Ser Asp Glu Pro Cys Ile Gly Gln Glu Tyr Gln 355 360 365 Ile Ile Ala Gln Ile Asn Gly Asn Tyr Ala Arg Leu Leu Asp Thr Val 370 375 380 Pro Leu Asp Tyr Glu Phe Leu Ala Thr Glu Gly Lys Ser Val Cys 385 . 390 . 395 .

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<222> (18)

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Ser

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Glu Gly Asn Thr Phe Ser Thr Leu Ala Gly Leu Val Phe Glu Trp Thr Ile Val Lys Asp Ser Glu Ala Asp Arg Phe Ser Asp Ser His Asn Ala Leu Arg Ile Leu Thr Phe Leu Glu Ser Thr Tyr Ile Pro Pro Ser Tyr · · Ile Ser Glu Met Glu Lys Ala Ala Lys Gln Gly Asp Thr Ile Leu Val - 195 Ser Gly Met Lys Thr Gly Ser Xaa Lys Leu Lys Ala Arg Ile Gln Glu Ala Val Tyr Lys Asn Val Arg Pro Ala Xaa Val Arg Leu Leu Ile Leu Glu Asn Ile Leu Leu Asn Pro Ala Tyr Asp Val Tyr Leu Met Val Gly Thr Ser Ile His Tyr Lys Val Gln Lys Ile Arg Gln Gly Lys Ile Thr Glu Leu Xaa Met Pro Ser Asp Gln Tyr Glu Leu Gln Leu Gln Asn Ser Ile Pro Gly Pro Glu Gly Asp Pro Thr Arg Pro Val Ala Val Leu Ala Gln Asp Thr Ser Met Val Thr Ala Leu Gln Leu Gly Gln Ser Ser Leu Val Leu Gly His Arg Ser Ile Arg Met Gln Gly Ala Ser Arg Leu Pro 335 . Asn Ser Thr Ile Tyr Val Val Glu Pro Gly Tyr Leu Gly Phe Thr Val His Pro Gly Asp Arg Trp Val Leu Glu Thr Gly Arg Leu Tyr Glu Ile · 355 Thr Ile Glu Val Phe Asp Lys Phe Ser Asn Lys Val Tyr Val Ser Asp Asn Ile Arg Ile Glu Thr Val Leu Pro Ala Glu Phe Phe Glu Val Leu 395 . 400 Ser Ser Ser Gln Asn Gly Ser Tyr His Arg Ile Arg Ala Leu Lys Arg Gly Gln Thr Ala Ile Asp Ala Ala Leu Thr Ser Val Val Asp Gln Asp Gly Gly Val His Ile Leu Gln Val Pro Val Trp Asn Gln Gln Glu Val Glu Ile His Ile Pro Ile Thr Leu Tyr Pro Ser Ile Leu Thr Phe Pro 

Trp Gln Pro Lys Thr Gly Ala Tyr Gln Tyr Thr Ile Arg Ala His Gly Gly Ser Gly Asn Phe Ser Trp Ser Ser Ser Ser His Leu Val Ala Thr Val Thr Val Lys Gly Val Met Thr Thr Gly Ser Asp Ile Gly Phe Ser 510 · . . Val Ile Gln Ala His Asp Val Gln Asn Pro Leu His Phe Gly Glu Met Lys Val Tyr Val Ile Glu Pro His Ser Met Glu Phe Ala Pro Cys Gln Val Glu Ala Arg Val Gly Gln Ala Leu Glu Leu Pro Leu Arg Ile Ser Gly Leu Met Pro Gly Gly Ala Ser Glu Val Val Thr Leu Ser Asp Cys Ser His Phe Asp Leu Ala Val Glu Val Glu Asn Gln Gly Val Phe Gln Pro Leu Pro Gly Arg Leu Pro Pro Gly Ser Glu His Cys Ser Gly Val · . 600 Arg Val Lys Ala Glu Ala Gln Gly Ser Thr Thr Leu Leu Val Ser Tyr 615 , -Arg His Gly His Val His Leu Ser Ala Lys Ile Thr Ile Ala Ala Tyr Leu Pro Leu Lys Ala Val Asp Pro Ser Ser Val Ala Leu Val Thr Leu Gly Ser Ser Lys Glu Met Leu Phe Glu Gly Gly Pro Arg Pro Trp Ile . 665 Leu Glu Pro Ser Lys Phe Phe Gln Asn Val Thr Ala Glu Asp Thr Asp Ser Ile Gly Leu Ala Leu Phe Ala Pro His Ser Ser Arg Asn Tyr Gln . Gln His Trp Ile Leu Val Thr Cys Gln Ala Leu Gly Glu Gln Val Ile . Ala Leu Ser Val Gly Asn Lys Pro Ser Leu Thr Asn Pro Phe Pro Ala Val Glu Pro Ala Val Val Lys Phe Val Cys Ala Pro Pro Ser Arg Leu Thr Leu Val Pro Val Tyr Thr Ser Pro Gln Leu Asp Met Ser Cys Pro 755 760 Leu Leu Gln Gln Asn Lys Gln Val Val Pro Val Ser Ser His Arg Asn . 

Pro Leu Leu Asp Leu Ala Ala Tyr Asp Gln Glu Gly Arg Arg Phe Asp 785 790 795 800 Asn Phe Ser Ser Leu Ser Ile Gln Trp Glu Ser Thr Arg Pro Val Leu 805 810 815 Ala Ser Ile Glu Pro Glu Leu Pro Met Gln Leu Val Ser Gln Asp Asp 820 825 830. Glu Ser Gly Gln Lys Lys Leu His Gly Leu Gln Ala Ile Leu Val His 835 - 840 845 Glu Ala Ser Gly Thr Thr Ala Ser Leu Pro Leu Pro Leu Ala Thr Arg 850 855 860 Ser Pro Thr Ser Ala Leu Xaa Glu Gln Ser Ser Arg Met Thr Leu Trp 865 870 875 880 Cys Leu Cys Arg Pro Pro 885 <210> 1242 <211> 831 <212> PRT <213> Homo sapiens <400> 1242 Met Ala Ala Arg Gly Arg Gly Leu Leu Leu Leu Thr Leu Ser Val Leu 1 . 5. 10 15 Leu Ala Ala Gly Pro Ser Ala Ala Ala Ala Lys Leu Asn Ile Pro Lys 20 25 30 Val Leu Leu Pro Phe Thr Arg Ala Thr Arg Val Asn Phe Thr Leu Glu 35 40 45 Ala Ser Glu Gly Cys Tyr Arg Trp Leu Ser Thr Arg Pro Glu Val Ala 50 55 60 . Ser Ile Glu Pro Leu Gly Leu Asp Glu Gln Gln Cys Ser Gln Lys Ala 65 70 75 80 Val Val Gln Ala Arg Leu Thr Gln Pro Ala Arg Leu Thr Ser Ile Ile 85 90 Phe Ala Glu Asp Ile Thr Thr Gly Gln Val Leu Arg Cys Asp Ala Ile 100 105 110 . . Val Asp Leu Ile His Asp Ile Gln Ile Val Ser Thr Thr Arg Glu Leu 115 120 125 Tyr Leu Glu Asp Ser Pro Leu Glu Leu Lys Ile Gln Ala Leu Asp Ser 130 135 140 Glu Gly Asn Thr Phe Ser Thr Leu Ala Gly Leu Val Phe Glu Trp Thr 145 \_ 150 155 160

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	Ile	Val	Lys	Asp	Ser 165	Glu	Ala	Asp	Arg	Phe 170	Ser	Asp	Ser	His	Asn 175	Ala	
	Leu	Arg	Ile	Leu 180	Thr	Phe	Leu	Glu	Ser 185	Thr	Tyr	Ile	Pro	Pro 190	Ser	Tyr	
	Ile	Ser	Glu 195	Met	Glu	Lys	Ala	Ala 200	Lys	Gln	Gly	Asp	Thr 205	Ile	Leu	Val	
		Gly 210	Met	Lys	Thr	Gly	Ser 215	Ser	Lys	Leu	Lys	Ala 220	Arg	Ile	Gln	Glu	
	Ala 225	Val	Tyr	Lys	Asn	Val 230	Arg	Pro	Ala	Glu	Val 235	Arg	Leu	Leu	Ile	Leu 240	
	Glu	Asn	Ile	Leu	Leu 245	Asn	Pro	Ala	Tyr	Asp 250	Val	Tyr	Leu	Met	Val 255	Gly	
	Ţhr	Ser	Ile	His 260	Tyr	Lys	<u>V</u> al	Gln	Lys 265	Ile	Arg	Gln	Gly	Lys 270	Ile	Thr	
	Glu	Leu	Ser 275	Met	Pro	Ser	Asp	Gln 280	Týr	Glu	Leu	Gln	Leu 285	Gln	Asn	Ser	-
	Ile	Pro 290	Gly	Pro	Glu	Gly	Asp 295	Pro	Thr	Arg	Pro	Val 300	Ala	Val	Leu	Ala	
	Gln 305	Asp	Thr	Ser	Met	Val 310	Thr	Ala	Leu	Gln	Leu 315	Gly	Gln	Ser	Ser	Leu 320	
•	Val	Leu	Gly	His	Arg 325	Ser	Ile	Arg	Met	Gln 330	Gly	Ala	Ser	Arg	Leu 33.5	Pro	
				340		Val		•	345					350			
			355			Trp		360					365				
	Thr	Ile 370	Glu	Val	Phe	Asp	Lys 375	Phe	Ser	Asn	Lys	Val 380	Tyr	Val	Ser	Asp	
	385					Thr 390					395					400	
					405	Gly			•	410					415		
	Gly	Gln	Thr	Ala 420	Ile	Asp	Ala	Ala	Leu. 425	Thr	Ser	Val	Val	Asp 430	Gln	Asp	
			43.5			Leu		440					445				
	· .	450		•		Ile	455					460					
	Trp 465	Gln	Pro	Lys	Thr	Gly 470	Ala	Tyr	Gln	Tyr	Thr 475	Ile	Arg	Ala	His	Gly 480	
										107		•					

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Gly	Ser	Gly	Asn	Phe 485	Ser	Trp	Ser	Ser	Ser 490	Ser	His	Leu	Val	Ala 495	Thr
Val	Thr	Val	Lys 500	Gly	Val	Met	Thr	Thr 505	Gly	Ser	Asp	Ile	Gly 510	Phe	Ser
Val	Ile	Gln 515	Ala	His	Asp	Val	Gln 520	Asn	Pro	Leu	His	Phe 525	Gly	Glu	Met
Lys	Val 530	Tyr	Val	Ile	Glu	Pro 535	His	Ser	Met	Glu	Phe 540	Ala	Pro	Cys	Gln
Val 545	Glu	Ala	Arg		Gly 550	Gln	Ala	Leu	Glu	Leu 555	Pro	Leu	Arg	Ile	Ser 560
Gly	Leu	Met	Pro	Gly 565	Gly	Ala	Ser		Val 570	Val	Thr	Leu	Ser	Asp 575	Cys
Ser	His	Phe	Asp 580	Leu	Ala	Val	Glu	Val 585	Glu	Asn	Gln	Gly	Val 590	Phe	Gln
Pro	Leu	Pro 595	Gly	Arg	Leu	Pro	Pro 600	Gly	Ser	Glu	His	Cys 605	Ser	Gly	Val
Arg	Val 610	Lys	Ala	Glu	Ala	Gln 615	Gly	Ser	Thr	Thr	Leu 620	Leu	Val	Ser	Tyr
Arg 625	His	Gly	His	Val	His 630	Leu	Ser	Ala	Lys	Ile 635	Thr	Ile	Ala	Ala	Tyr 640
Leu	Pro	Leu	Lys	Ala 645	Val	Asp	Pro	Ser	Ser 650	Val	Ala	Leu	Val	Thr 655	Leu
Gly	Ser	Ser	Lys 660	Glu	Met	Leu	Phe	Glu 665	Gly	Gly	Pro	Arg	Pro 670	Trp	Ile
		675		-	Phe .		680					685			_
	690				Leu	695					700				
705					Val 710					715			•	•	720
		•		725	Asn				730					735	
			740		Val			745	_				750		
		755			Tyr		760				-	765			•
	770				Lys	775					780				
Pro 785	Leu	Leu	Asp	Leu	Ala 790	Ala	Tyr	Asp	Gln	Glu 795	Gly	Arg	Arg	Phe	Asp 8 <u>0</u> 0
								•	708						

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Asn Phe Ser Ser Leu Ser Ile Gln Trp Glu Ser Thr Arg Pro Val Leu . 805 810 815 Ala Ala Ser Ser Leu Ser Cys His Ala Ala Gly Val Pro Gly Arg . 820 825 830 <210> 1243 <211> 89 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (39) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (65) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1243 Met Pro Val Pro Leu Leu Ala Ser Ala Ala Trp Cys His Leu Cys Ala 1 5 10 15 Gly Ala Leu Pro Ala Trp Leu Trp Leu Pro Gly Gly Gln Leu Leu His 20 25 30 Asn Gly Thr Cys Val Pro Xaa Thr Ala Cys Pro Cys Thr Gln His Ser . 35 40 · 45 Leu Pro Trp Gly Leu Thr Leu Thr Leu Glu Glu Gln Ala Gln Glu Leu 55 -50 60 Xaa Pro Gly Thr Val Leu Thr Arg Asn Cys Thr Pro Leu Cys Leu Pro 65 70 75 80 Leu Trp Ser Leu Gln Leu Leu Pro Arg 85 . <210> 1244 <211> 79 <212> PRT <213> Homo sapiens <400> 1244 Ser Gly Trp Gln Val Pro Ser Ser Val Lys His Leu Pro Tyr Asp Asn 1 5 . 10 15 . Leu Arg Ser His Cys Val Ala Asp Glu Gly Glu Thr Glu Val Glu Gly 20 25 30 Thr Arg Ala Thr Trp Val Glu His Ser Gly Arg Pro Gly Val Gly Ser 35 . 40 45 Gly Arg Pro Pro Gly Thr Ser Leu Thr Thr Leu Pro Leu Leu Thr

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. 50 55 60 His Leu Ser Leu Thr Cys Pro Leu Gly Gly Asp Phe Ser Lys Arg 65 . 70 75 ·<210> 1245 <211> 89 . <212> PRT <213> Homo sapiens <400> 1245 Met Pro Val Pro Leu Leu Ala Ser Ala Ala Trp Cys His Leu Cys Ala 1 5 . 10 15 Gly Ala Leu Pro Ala Trp Leu Trp Leu Pro Trp Arg Ala Ala Ala Ala 20 25 . 30 . . . Gln Trp His Val Cys Ala Ser His Cys Leu Pro Leu His Pro Ala Phe . 40 35 45 Ser Ala Leu Gly Pro His Pro Asp Pro Gly Arg Ala Gly Pro Gly Ala 50 55 60 Ala Pro Arg Asp Cys Ala His Pro Glu Leu His Pro Leu Cys Leu Pro 65 70 **`** 75 80 Arg Trp Ser Leu Gln Leu Leu Pro Arg 85 <210> 1246 <211> 334 · <212> PRT <213> Homo sapiens <220> <221> SITE <222> (124) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (129) <223> Xaa equals any of the naturally occurring L-amino acids ΄. <220> <221> SITE . <222> (214) <223> Xaa equals any of the naturally occurring L-amino acids ۰. . <220> <221> SITE <222> (224) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1246 Met Asp Gln Ala Leu Ser Leu Trp Phe Leu Leu Gly Trp Ile Gly Gly.

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	Asp	Ser	Cys	Asn 20	Leu	Ile	Gly	Ser	Phe 25	Leu	Ala	Asp	Gln	Leu 30	Pro	Leu	
	Gln	Thr	Tyr 35	Thr	Ala	Val	Tyr	Tyr 40	Val	Leu	Ala	Asp	Leu 45	Val	Met	Leu	
	Thr	Leu 50	Tyr	Phe	Tyr	Tyr	Lys 55		Arg	Thr	Arg	Pro 60	Ser	Leu	Leu	Ser	
	Ala 65	Pro	Ile	Asn	Ser	Val 70	Leu	Leu	Phe	Leu	Met 75	Gly	Met	Ala	Cys	Ala 80	r
	Thr	Pro	Leu	Leu	Ser 85	Ala	Ala	Gly	Pro	Val 90	Ala	Ala	Pro	Arg	Glu 95	<b>Ala</b>	
	Phe	Arg	Gly	Arg 100	Ala	Leu	Leu	Ser	Val 105	Glu	Ser	Gly	Ser	Lys 110	Pro	Phe	
	Thr	Arg	Gln 115	Glu	Val	Ile	Gly	Phe 120	Val	Ile	Gly	Xaa	Ile 125	Ser	Ser	Val	
• •	Xaa	Tyr 130	Leu	Leu	Ser -	Arg	Leu 135	Pro	Gln	Ile	Arg	Thr 140	Asn	Phe	Leu	Arg	
	Lys 145	Ser	Ţhr	Gln	Gly	Ile 150	Ser	Tyr	Ser	Leu	Phe 155	Ala	Leu	Val	Met	Leu 160	
	Gly	Asn	Thr	Lieu	Tyr 165	Gly	Leu	Ser	Val	Leu 170	Leu	Lys	Asn	Pro	Glu 175	Glu	
	Gly	Gln	Ser	Glu 180	Gly	Ser	Tyr	Leu.	Leu 185	His	His	Leu	Pro	Trp 190	Leu	Val	
	Gly	Ser	Leu 195	Gly	Val	Leu	Leu	Leu 200		Thr	Ile	Ile	Ser 205	Ile	Gln	Phe	
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	Pro 225	Ala	Asp	Gln	Asn	Gln 230		Glu	Arg	Arg	Arg 235		Gly	Thr	Thr	Gly 240	
	Cys	His	Thr		Gln 245	Gİu	Glu	Val	Trp	Thr 250	Val	Met	Val	Arg	Arg 255	Pro	
	Cys	Ile	Ser	Leu 260	Arg	Val	Ala	Ser	Gly 265	Ser	Ser	Val	Asp	Arg 270	Thr	Val	
	Pro	Pro	Gly 275	Thr	His	Leu	Gln	Val 280	Asp	Pro	Glu	Ala	Ser 285	Arg	Pro	Gly	
	Leu	Glu 290	Arg	Arg	Pro	Gln	Gly 295	Leu	Ser	Gly	Aşp	Ser 300	Glu	Ala	Ala	Pro	·
•	Pro 305	Thr	Thr	Tyr	Leu	Ile 310	Leu	Pro	Thr	Gln	Asp 315	Cys	Pro	Val	Asn	Ser 320	
	Arg	Ġln	Leu	Asn	Lys	Gln	Ala	Gly	Tyr	Ser	Gly	Ser	His	Leu		•	

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<210> 1249 <211> 184 <212> PRT <213> Homo sapiens <400> 1249 Met Lys Ile Leu Val Ala Phe Leu Val Val Leu Thr Ile Phe Gly Ile 5 . 10 15 Gln Ser His Gly Tyr Glu Val Phe Asn Ile Ile Ser Pro Ser Asn Asn 20 25 30 Gly Gly Asn Val Gln Glu Thr Val Thr Ile Asp Asn Glu Lys Asn Thr 35 40 45 Ala Ile Ile Asn Ile His Ala Gly Ser Cys Ser Ser Thr Thr Ile Phe 50 55 60 Asp Tyr Lys His Gly Tyr Ile Ala Ser Arg Val Leu Ser Arg Arg Ala

75 · · Cys Phe Ile Leu Lys Met Asp His Gln Asn Ile Pro Pro Leu Asn Asn . 85 Leu Gln Trp Tyr Ile Tyr Glu Lys Gln Ala Leu Asp Asn Met Phe Ser 100 . 105 Ser Lys Tyr Thr Trp Val Lys Tyr Asn Pro Leu Glu Ser Leu Ile Lys . 120 Asp Val Asp Trp Phe Leu Leu Gly Ser Pro Ile Glu Lys Leu Cys Lys . His Ile Pro Leu Tyr Lys Gly Glu Val Val Glu Asn Thr His Asn Val · 160 Gly Ala Gly Gly Cys Ala Lys Ala Gly Leu Leu Gly Ile Leu Gly Ile Ser Ile Cys Ala Asp Ile His Val 180. <210> 1250 <211> 173 <212> PRT <213> Homo sapiens <400> 1250 Met Ala Val Arg Ala Leu Lys Leu Leu Thr Thr Leu Leu Ala Val Val Ala Ala Ala Ser Gln Ala Glu Val Glu Ser Glu Ala Gly Trp Gly Met Val Thr Pro Asp Leu Leu Phe Ala Glu Gly Thr Ala Ala Tyr Ala Arg Gly Asp Trp Pro Gly Val Val Leu Ser Met Glu Arg Ala Leu Arg Ser Arg Ala Ala Leu Arg Ala Leu Arg Leu Arg Cys Arg Thr Gln Cys Ala Ala Asp Phe Pro Trp Glu Leu Asp Pro Asp Trp Ser Pro Ser Pro Ala Gln Ala Ser Gly Ala Ala Ala Leu Arg Asp Leu Ser Phe Phe Gly Gly Leu Leu Arg Arg Ala Ala Cys Leu Arg Arg Cys Leu Gly Pro Pro Ala Ala Thr Arg Ser Ala Lys Arg Trp Ser Trp Ser Ser Ala Ser Gly Pro Leu Gln Leu Pro Ala Gly Arg Leu Leu Gln Asp Gln Gln Val Gly Glu . 160

Ser Cys Cys Cys Ser Thr His Leu Leu Arg Gly Gln Ser 165 170

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Tyr Leu Glu Tyr Asn Ala Asp Leu Phe Gln Ala Ile Thr Asp His Tyr · 265 260 270 Ile Gln Val Leu Asn Cys Lys Gln Asn Cys Val Thr Glu Leu Ala Ser 275 280 285 His Pro Ser Arg Glu Lys Pro Phe Glu Asp Phe Leu Pro Ser His Tyr 290 . 295 300 Asn Tyr Leu Gln Phe Ala Tyr Tyr Asn Ile Gly Asn Tyr Thr Gln Ala 310 305 315 . 320 Val Glu Cys Ala Lys Thr Tyr Leu Leu Phe Phe Pro Asn Asp Glu Val 325 330 335 Met Asn Gln Asn Leu Ala Leu Leu Cys Ser Tyr Ala Trp Arg Arg Thr 340 345 350 His Gln Ile His Arg Pro Pro 355 . <210> 1252 <211> 77 <212> PRT ۰. <213> Homo sapiens <400> 1252 Met Thr Ile Phe Thr Pro Phe Leu Val Leu Leu Leu Val Asn Ser 5 10 . . 15 1 Pro Arg Phe Ser Thr Ile Thr Leu Met Arg Ser Gly Phe His Asn Pro 20 . 25 30 Ser Val Cys Leu Ser Phe Thr Leu Lys Pro Gln Cys Tyr Leu Val Leu 35 40 · . 45 Met Tyr Gln Lys Asn Arg Arg Gln Asp Gly Ser Lys Val Phe Phe Lys 50 55 60 Thr Ala Arg Leu Lys Phe Tyr Leu Asn Ile Thr Ala Lys 65 70 75 <sup>v</sup> <210> 1253 <211> 77 <212> PRT <213> Homo sapiens <400> 1253 Met Thr Ile Phe Thr Pro Phe Leu Val Leu Leu Leu Val Asn Ser 5 10 1 15 Pro Arg Phe Ser Thr Ile Thr Leu Met Arg Ser Gly Phe His Asn Pro · 20 . 30 25 Ser Val Cys Leu Ser Phe Thr Leu Lys Pro Gln Cys Tyr Leu Val Leu

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Met Tyr Gln Lys Asn Arg Arg Gln Asp Gly Ser Lys Val Phe Phe Lys 50 55 60 Thr Ala Arg Leu Lys Phe Tyr Leu Asn Ile Thr Ala Lys 65 . 70 75 . <210> 1254 <211> 140 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (136) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1254 Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu Leu .1 5 10 15 Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp Lys Thr 30 20 25 Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly Phe Ser Lys 35 . 40 45 Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly Ile Thr Gln Cys 50 55 60 Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala Asp Ile Gln Ala Ala 65 70 75 80 Gln Ala Met Met Val Thr Ser Ser Ala Ile Ser Ser Leu Ala Cys Ile 85 . 90 95 Ile Ser Val Val Gly Met Arg Cys Thr Val Phe Cys Gln Glu Ser Arg · 100 105 110 Ala Lys Asp Arg Val Ala Val Ala Gly Gly Val Phe Phe Ile Leu Gly 115 120 125 Ser Leu Leu Gly Phe Ile Pro Xaa Ala Trp Asn Leu 130 135 140 <210> 1255 <211> 86 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (33) . <223> Xaa equals any of the naturally occurring L-amino acids

<220>

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Gly Glu Ala Leu Tyr Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile 165 170 Ala Gly Ile Ile Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser 180 185 190 Asn Tyr Tyr Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser 195 200 205 Pro Arg Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr 210 215 220 Ser Leu Thr Gly Tyr Val 225 230 <210> 1257 <211> 331 <212> PRT <213> Homo sapiens <400> 1257 Met Trp Leu Trp Glu Asp Gln Gly Gly Leu Leu Gly Pro Phe Ser Phe 1. 5 Leu Leu Val Leu Leu Leu Val Thr Arg Ser Pro Val Asn Ala Cys • . 20 25 30 Leu Leu Thr Gly Ser Leu Phe Val Leu Leu Arg Val Phe Ser Phe Glu 35 40 45 Pro Val Pro Ser Cys Arg Ala Leu Gln Val Leu Lys Pro Arg Asp Arg 55 50 60 . Ile Ser Ala Ile Ala His Arg Gly Gly Ser His Asp Ala Pro Glu Asn .70 65 75 80 Thr Leu Ala Ala Ile Arg Gln Ala Ala Lys Asn Gly Ala Thr Gly Val 85 90 95 Glu Leu Asp Ile Glu Phe Thr Ser Asp Gly Ile Pro Val Leu Met His 100 105 110 Asp Asn Thr Val Asp Arg Thr Thr Asp Gly Thr Gly Arg Leu Cys Asp 115 120 125 Leu Thr Phe Glu Gln Ile Arg Lys Leu Asn Pro Ala Ala Asn His Arg 130 . 135 140 . Leu Arg Asn Asp Phe Pro Asp Glu Lys Ile Pro Thr Leu Arg Glu Ala 155 160 Val Ala Glu Cys Leu Asn His Asn Leu Thr Ile Phe Phe Asp Val Lys 170 175 165 . Gly His Ala His Lys Ala Thr Glu Ala Leu Lys Lys Met Tyr Met Glu 180 185 190 .

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Phe Pro Gln Leu Tyr Asn Asn Ser Val Val Cys Ser Phe Leu Pro Glu 195 200 205 Val Ile Tyr Lys Met Arg Gln Thr Asp Arg Asp Val Ile Thr Ala Leu 215 210 220 Thr His Arg Pro Trp Ser Leu Ser His Thr Gly Asp Gly Lys Pro Arg 225 230 235 240 Tyr Asp Thr Phe Trp Lys His Phe Ile Phe Val Met Met Asp Ile Leu 245 250 255 Leu Asp Trp Ser Met His Asn Ile Leu Trp Tyr Leu Cys Gly Ile Ser 260 265 270 Ala Phe Leu Met Gln Lys Asp Phe Val Ser Pro Ala Tyr Leu Lys Lys 275 280 285 Trp Ser Ala Lys Gly Ile Gln Val Val Gly Trp Thr Val Asn Thr Phe 290 . 295 300 Asp Glu Lys Ser Tyr Tyr Glu Ser His Leu Gly Ser Ser Tyr Ile Thr 305 310 • 315 320 Asp Ser Met Val Glu Asp Cys Glu Pro His Phe 325 . 330 . <210> 1258 <211> 27 <212> PRT <213> Homo sapiens <400> 1258 Gly Thr Pro Ala Gly Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg 5 1 15 10 . Pro Ile Gly Val His Leu His Ser Val Arg Asp 20 25 <210> 1259 <211> 485 <212> PRT <213> Homo sapiens . <400> 1259 Ala Arg Gly Arg Leu Leu Pro Trp Trp Leu Ala Ala Gly Cys Ser Met 1 . 5 . 10 . 15 Ser Arg Leu Gly Ala Leu Gly Gly Ala Arg Ala Gly Leu Gly Leu Leu 20 25 30 Leu Gly Thr Ala Ala Gly Leu Gly Phe Leu Cys Leu Leu Tyr Ser Gln 35 40 45 - Arg Trp Lys Arg Thr Gln Arg His Gly Arg Ser Gln Ser Leu Pro Asn

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Ser Leu Asp Tyr Thr Gln Thr Ser Asp Pro Gly Arg His Val Met Leu Leu Arg Ala Val Pro Gly Gly Ala Gly Asp Ala Ser Val Leu Pro Ser 85 · Leu Pro Arg Glu Gly Gln Glu Lys Val Leu Asp Arg Leu Asp Phe Val · 100 \_ 105 Leu Thr Ser Leu Val Ala Leu Arg Arg Glu Val Glu Glu Leu Arg Ser 1.25 Ser Leu Arg Gly Leu Ala Gly Glu Ile Val Gly Glu Val Arg Cys His Met Glu Glu Asn Gln Arg Val Ala Arg Arg Arg Arg Phe Pro Phe Val 1,45 155 . Arg Glu Arg Ser Asp Ser Thr Gly Ser Ser Ser Val Tyr Phe Thr Ala Ser Ser Gly Ala Thr Phe Thr Asp Ala Glu Ser Glu Gly Gly Tyr Thr Thr Ala Asn Ala Glu Ser Asp Asn Glu Arg Asp Ser Asp Lys Glu Ser . Glu Asp Gly Glu Asp Glu Val Ser Cys Glu Thr Val Lys Met Gly Arg \_ 215 Lys Asp Ser Leu Asp Leu Glu Glu Glu Ala Ala Ser Gly Ala Ser Ser Ala Leu Glu Ala Gly Gly Ser Ser Gly Leu Glu Asp Val Leu Pro Leu Leu Gln Gln Ala Asp Glu Leu His Arg Gly Asp Glu Gln Gly Lys Arg Glu Gly Phe Gln Leu Leu Leu Asn Asn Lys Leu Val Tyr Gly Ser Arg . Gln Asp Phe Leu Trp Arg Leu Ala Arg Ala Tyr Ser Asp Met Cys Glu . Leu Thr Glu Glu Val Ser Glu Lys Lys Ser Tyr Ala Leu Asp Gly Lys Glu Glu Ala Glu Ala Ala Leu Glu Lys Gly Asp Glu Ser Ala Asp Cys His Leu Trp Tyr Ala Val Leu Cys Gly Gln Leu Ala Glu His Glu Ser . 350 Ile Gln Arg Arg Ile Gln Ser Gly Phe Ser Phe Lys Glu His Val Asp 360 365 Lys Ala Ile Ala Leu Gln Pro Glu Asn Pro Met Ala His Phe Leu Leu 

Gly Arg Trp Cys Tyr Gln Val Ser His Leu Ser Trp Leu Glu Lys Lys . 390 385 395 400 Thr Ala Thr Ala Leu Leu Glu Ser Pro Leu Ser Ala Thr Val Glu Asp 405 410 415 Ala Leu Gln Ser Phe Leu Lys Ala Glu Glu Leu Gln Pro Gly Phe Ser 420 425 430 . Lys Ala Gly Arg Val Tyr Ile Ser Lys Cys Tyr Arg Glu Leu Gly Lys 435 . 440 445 Asn Ser Glu Ala Arg Trp Trp Met Lys Leu Ala Leu Glu Leu Pro Asp . 450 . 455 460 Val Thr Lys Glu Asp Leu Ala Ile Gln Lys Asp Leu Glu Glu Leu Glu 465 470 475 480 Val Ile Leu Arg Asp 485 ι <210> 1260 <211> 470 <212> PRT <213> Homo sapiens <400> 1260 Met Ser Arg Leu Gly Ala Leu Gly Gly Ala Arg Ala Gly Leu Gly Leu 1 5 . 10 15 Leu Leu Gly Thr Ala Ala Gly Leu Gly Phe Leu Cys Leu Leu Tyr Ser 20 25 30 Gln Arg Trp Lys Arg Thr Gln Arg His Gly Arg Ser Gln Ser Leu Pro 35 40 45 Asn Ser Leu Asp Tyr Thr Gln Thr Ser Asp Pro Gly Arg His Val Met 50 55· 60 . Leu Leu Arg Ala Val Pro Gly Gly Ala Gly Asp Ala Ser Val Leu Pro 70 · , 75 80 65 Ser Leu Pro Arg Glu Gly Gln Glu Lys Val Leu Asp Arg Leu Asp Phe 85 90 95 Val Leu Thr Ser Leu Val Ala Leu Arg Arg Glu Val Glu Glu Leu Arg 100 · 105 110 Ser Ser Leu Arg Gly Leu Ala Gly Glu Ile Val Gly Glu Val Arg Cys 115 120 125 His Met Glu Glu Asn Gln Arg Val Ala Arg Arg Arg Arg Phe Pro Phe 130 135 140 Val Arg Glu Arg Ser Asp Ser Thr Gly Ser Ser Ser Val Tyr Phe Thr 145 150 155 1.60

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Ala	Ser	Ser	Gly	Ala 165	Thr	Phe	Thr	Asp	Ala 170	Glu	Ser	Glu	Gly	Gly 175	Tyr <sup>.</sup>	
Thr	Thr	Ala	Asn 180	Ala	Glu	Ser	Asp	Asn 185	Glu	Arg	Asp	Ser	Asp 190	Lys	Glu	
Ser	Glu	Asp 195	Gly	Glu	Asp	∙Glu	Val 200	Ser	Cys	Glu	Thr	Val 205	Lys	Met	Gly	
Arg	Lys 210	Asp	Ser	Leu	Asp	Leu 215	Glu	Glu	Glu	Ala	Ala 220	Ser	Gly	Ala	Ser	
Ser 225	Ala	Leu	Glu	Ala	Gly 230	Gly	Ser	Ser	Gly	Leu 235	Glu	Asp	Val	Leu	Pro 240	
Leu	Leu	Gln	Gln	Ala 245	Asp	Glu	Leu	His '	Arg 250	Gly	Asp	Glu	Gln	Gly 255	Lys	
Arg	Glu	Gly	Phe 260	Gln	Leu	Leu	Leu	Asn 265	Asn	Lys	Leu	Val	Tyr 270	Gly	Ser .	
Arg	Gln	Asp 275	Phe	Leu	Trp	Arg	Leu 280		Arg	Ala	Tyr	Ser 285	Asp	Met	Cys	
Glu	Leu 290	Thr	Glu	Glu	Val	Ser 295	Glu	Lys	Lys	Ser	Tyr 300	Ala	Leu	Asp	Gly	
Lys 305	Glu	Glu	Ala	Glu	Ala 310	Ala	Leu	Glu	Lys	Gly 315	Asp	Glu	Ser	Ala	Asp 320	
Cys	His	Leu	Trp	Tyr 325	Ala	Val	Leu	Cys	Gly 330	Gln	Leu	Ala	Glu	His 335	Glų .	
Ser	Ile	Gln	Arg 340	Arg	Ile	Gln	Ser	Gly 345	Phe	Ser	Phe	Lys	Glu 350	His	Val	
Asp	Lys	Ala 355	Ile	Åla	Leu	Gln	Pro 360	Glu	Asn	Pro	Met	Ala 365	His	Phe	Leu	
Leu	Gly 370	Arg	Trp	Cys	Tyr	Gln 375	Val	Ser	His	Leu	Ser 380	Trp	Leu	Glu	Lys	
385					390					Leu 395			•		400	
	•			405	•	. ·			410	Glu				415		•
			420		-		•	425		Cys	•		430			
		435					440			Leu		445				
	450					Leu 455	Ala	Ile	Gln	Lys	Asp 460	Leu	Glu	Glu	Leu	
Glu 465	Val	Ile	Leu	Arg	Asp 470											

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Met His Leu Leu Leu Pro Pro Gly Leu 100 105 . <210> 1264 <211> 105 <212> PRT <213> Homo sapiens <400> 1264 Met Leu Val Cys Met Leu Gly Cys Leu Ala Asn Leu Val Val Gly . 5 . 1 10 15 Phe Leu Lys Glu Lys Thr Phe Pro Leu Ala Met Ala Arg Thr Arg Gly 25 20 30 Ser Ser Leu Ser Leu Leu Pro Thr Pro Pro Phe Pro Cys Pro Cys Pro 35 40 45 . . Asp Ala Ser Arg Leu Arg Glu Lys His Cys Ile Gln Thr Glu Gly Ser 50 55 60 . Ala Ala Ser Phe Gln Lys Val Ile Gly Lys Ala Leu Glu Arg Arg Ala 65 70 75 80 Val Leu Gln Leu Ala Leu Phe Leu His His Pro Pro Ser Leu Cys Ile 85 90 95 Met His Leu Leu Leu Pro Pro Gly Leu 100 105 <210> 1265 <211> 101 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (101) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1265 Met Thr Leu Cys Leu Val Thr Phe Leu Thr Ser Leu Pro Thr Ser Val 10 1 5 15 Pro Ala Cys Thr Ser Cys Trp Pro Gly Phe Met Arg Ser Ser Lys Asn 20 25 -30 Ala Tyr Asp Thr His His Trp Gly Gly Gln Arg Ser Met Asn Leu Glu 35 40 45. Ser Leu Thr Cys Gly Gln Leu Ala Ile Arg Trp Thr Arg Gly Trp Met 50 55 60 Thr Arg Pro Arg Gln Val Trp Ala Met Pro Gly Gln Thr Val Asp Val 65 · 70 - 75 80

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Tyr Leu Gly Arg Met Leu Gln Gly Val Val Leu Arg Gly Gln Thr Leu 85 90 95 Arg Gly Arg Ala Xaa 100 <210> 1266 <211> 50 <212> PRT <213> Homo sapiens <400> 1266 Lys Ala Val Thr Gly Trp Ala His Trp Leu Thr Pro Ile Ile Pro Ala 1 10 15 Leu Trp Glu Ala Lys Ala Gly Arg Ser Leu Glu Val Arg Ile Ser Arg 20 25 30 Pro Ala Trp Ser Thr Trp Gln Asn Leu Val Ser Thr Lys Asn Thr Lys 35 40 . 45 Ile Arg 50 . <210> 1267 <211> 120 <212> PRT <213> Homo sapiens . . <400> 1267 Glu Val Leu Phe Ser Asn Asp Ser Val Leu Gly His Phe Pro His Gln 5 10 15 . Ser Pro Asn Glu Arg Ala Arg Leu Tyr Phe Leu Leu Ala Trp Phe His 20 25 30 Ala Ile Ile Gln Glu Arg Leu Arg Tyr Ala Pro Leu Gly Trp Ser Lys 35 . 40 45 Lys Tyr Glu Phe Gly Glu Ser Asp Leu Arg Ser Ala Cys Asp Thr Val 50 55 60 Asp Thr Trp Leu Asp Asp Thr Ala Lys Ala Ser Val Gly His Ala Arg 70 65. . 75 80 Thr Asp Ser Gly Arg Val Ser Gly Lys Asp Ala Ala Gly Arg Gly Ala 85 ; 90 95 Glu Arg Pro Asp Ser Ala Trp Lys Ser Glu Leu Thr Pro Arg Asp Arg 100 105 110 Gln Ser Leu Ala Gly His Gly Glu 115 120

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. . 135 130 140 Ala Glu Leu Phe Leu Trp Ser Phe Leu Leu Trp Ser Asp Thr Ile Glu 145 150 155 160 Met Val Arg Val Ala Gly His Pro Asn Val Tyr Lys Ser Ser Trp Leu 165 170 175 Tyr Pro Val Tyr Ile Phe Ser Phe Ile Ser Leu Leu Arg Ile Thr Phe 180 185 190 Thr Pro Gln Asn Pro Leu Leu Asn Ser Leu Ser Val Leu Leu Gln Asp 195 200 205 Leu Pro Phe Val Phe Val Arg Leu Gly Leu Ile Ile Ala Leu Gly Thr 210 215 . 220 Ile Thr Pro Val Leu Gly Leu Cys Lys Asn Ile Leu Val Thr Leu Ser 225 230 235 240 Tyr Ile Tyr Phe Asn Tyr Leu Thr Arg Ile Arg Ile Phe Ser Ala Phe 245 250 255 Glu Met Ser Pro Phe 260 ' <210> 1270 <211> 277 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (158) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (277) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1270 Met Gly Leu Arg Ser Trp Leu Ala Ala Pro Trp Gly Ala Leu Pro Pro ÷ 5 1 10 15 20 25 30 Pro Pro Pro Thr Trp Ala Leu Ser Pro Arg Ile Ser Leu Pro Leu Gly 35 40 45 Ser Glu Glu Arg Pro Phe Leu Arg Phe Glu Ala Glu His Ile Ser Asn 50 55 60 Tyr Thr Ala Leu Leu Leu Ser Arg Asp Gly Arg Thr Leu Tyr Val Gly 65 70 75 80 Ala Arg Glu Ala Leu Phe Ala Leu Ser Ser Asn Leu Ser Phe Leu Pro

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Gly Gly Gl	ı Tyr Glr 100	Glu Le	ı Leu	Trp 105	Gly	Ala	Asp	Ala	Glu 110	Lys	Lys
Gln Gln Cy 11		e Lys Gl	/ Lys 120	Asp	Pro	Gln	Arg	Asp 125	Cys	Gln	Asn
Tyr Ile Ly 130	s Ile Leu	Leu Pro 13		Ser	Gly	Ser	His 140	Leu	Phe	Thr	Cys
Gly Thr Al 145	a Ala Phe	e Ser Pro 150	o Met	Cys	Thr	Tyr 155	Ile	Asn	Xaa	Glu	Asn 160
Phe Thr Le	ı Ala Arg 165		ı Lys	Gly	Asn 170	Val	Leu	Leu	Glu	Asp 175	Gly
Lys Gly Ar	g Cys Pro 180	) Phe Asj	o Pro	Asn 185 :	Phe	Lys	Ser	Thr	Ala 190	Leu	Val.
Val Asp Gly 19		ı Tyr Th	c Gly 200	Thr	Val	Ser	Ser	Phe 205	Gln	Gly	Asn
Asp Pro Ala 210	a Ile Ser	Arg Se 21		Ser	Leu	Arg	Pro 220	Thr	Lys	Thr	Glu
Ser Ser Le 225	ı Asn Trp	230 Leu	n Asp	Pro	Ala	Phe 235	Val	Ala	Ser	Ala	Tyr 240
Ile Pro Gl	ı Ser Leu 245		r Leu		Gly 250	Asp	Asp	Asp	Lys	Ile 255	Tyr
Phe Phe Ph	e Ser Glu 260	I Thr Gl	7 Gln	Glu 265	Phe	Glu	Phe	Phe	Glu 270	Asn	Thr
Ile Val Se 27		L						-			
<210> 1271 <211> 832 <212> PRT <213> Homo	sapiens										•
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Arg Pro Pr	o Leu Leu 20	ı Leu Le	ı Leu	Leu 25	Leu	Leu	Leu	Leu	Leu 30	Gln	Pro È
Pro Pro.Pr 3		Ala Le	ı Ser 40		Arg	Ile	Ser	Leu 45	Pro	Leu	Gly
Ser Glu Gl 50	1 Arg Pro	Phe Le 5		'Phe	Glu	Ala	Glu 60	His	Ile	Ser	Asn
Tyr Thr Al 65	a Leu Leu	ı Leu Se 70	r Arg	Asp	Gly	Arg 75	Thr	Leu	Tyr	Val	Gly 80
				•	729						•

Ala Arg Glu Ala Leu Phe Ala Leu Ser Ser Asn Leu Ser Phe Leu Pro Gly Gly Glu Tyr Gln Glu Leu Leu Trp Gly Ala Asp Ala Glu Lys Lys . 105 Gln Gln Cys Ser Phe Lys Gly Lys Asp Pro Gln Arg Asp Cys Gln Asn . . Tyr Ile Lys Ile Leu Leu Pro Leu Ser Gly Ser His Leu Phe Thr Cys Gly Thr Ala Ala Phe Ser Pro Met Cys Thr Tyr Ile Asn Met Glu Asn Phe Thr Leu Ala Arg Asp Glu Lys Gly Asn Val Leu Leu Glu Asp Gly . Lys Gly Arg Cys Pro Phe Asp Pro Asn Phe Lys Ser Thr Ala Leu Val . Val Asp Gly Glu Leu Tyr Thr Gly Thr Val Ser Ser Phe Gln Gly Asn Asp Pro Ala Ile Ser Arg Ser Gln Ser Leu Arg Pro Thr Lys Thr Glu Ser Ser Leu Asn Trp Leu Gln Asp Pro Ala Phe Val Ala Ser Ala Tyr Ile Pro Glu Ser Leu Gly Ser Leu Gln Gly Asp Asp Asp Lys Ile Tyr Phe Phe Ser Glu Thr Gly Gln Glu Phe Glu Phe Glu Asn Thr Ile Val Ser Arg Ile Ala Arg Ile Cys Lys Gly Asp Glu Gly Gly Glu Arg Val Leu Gln Gln Arg Trp Thr Ser Phe Leu Lys Ala Gln Leu Leu Cys Ser Arg Pro Asp Asp Gly Phe Pro Phe Asn Val Leu Gln Asp Val Phe Thr Leu Ser Pro Ser Pro Gln Asp Trp Arg Asp Thr Leu Phe Tyr . 335 Gly Val Phe Thr Ser Gln Trp His Arg Gly Thr Thr Glu Gly Ser Ala . 350 Val Cys Val Phe Thr Met Lys Asp Val Gln Arg Val Phe Ser Gly Leu Tyr Lys Glu Val Asn Arg Glu Thr Gln Gln Trp Tyr Thr Val Thr His Pro Val Pro Thr Pro Arg Pro Gly Ala Cys Ile Thr Asn Ser Ala Arg . 400

Glu Arg Lys Ile Asn Ser Ser Leu Gln Leu Pro Asp Arg Val Leu Asn Phe Leu Lys Asp His Phe Leu Met Asp Gly Gln Val Arg Ser Arg Met Leu Leu Gln Pro Gln Ala Arg Tyr Gln Arg Val Ala Val His Arg Val Pro Gly Leu His His Thr Tyr Asp Val Leu Phe Leu Gly Thr Gly Asp Gly Arg Leu His Lys Ala Val Ser Val Gly Pro Arg Val His Ile Ile Glu Glu Leu Gln Ile Phe Ser Ser Gly Gln Pro Val Gln Asn Leu Leu Leu Asp Thr His Arg Gly Leu Leu Tyr Ala Ala Ser His Ser Gly . . Val Val Gln Val Pro Met Ala Asn Cys Ser Leu Tyr Arg Ser Cys Gly Asp Cys Leu Leu Ala Arg Asp Pro Tyr Cys Ala Trp Ser Gly Ser Ser . Cys Lys His Val Ser Leu Tyr Gln Pro Gln Leu Ala Thr Arg Pro Trp · 550 Ile Gln Asp Ile Glu Gly Ala Ser Ala Lys Asp Leu Cys Ser Ala Ser 565 . Ser Val Val Ser Pro Ser Phe Val Pro Thr Gly Glu Lys Pro Cys Glu . Gln Val Gln Phe Gln Pro Asn Thr Val Asn Thr Leu Ala Cys Pro Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu Leu . 640 Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu Glu . 655 Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro Val Ile Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu Phe 

Val Leu Ala	Val Leu Le 725	u Pro Val	. Leu Ph 73		u Tyr Arg	His Arg 735
Asn Ser Met	Lys Val Ph 740	e Leu Lys	Gln Gl; 745	y Glu Cy	s Ala Ser 750	
Pro Lys Thr 755	Cys Pro Va	l Val Leu 760		o Glu Th	r Arg Pro 765	Leu Asn
Gly Leu Gly 770	Pro Pro Se	r Thr Pro 775	Leu Asj	p His Arg 780		Gln Ser
Leu Ser Asp 785	Ser Pro Pr 79		Arg Va	l Phe Thi 795	r Glu Ser	Glu Lys 800
Arg Pro Leu	Ser Ile Gl 805	n Asp Ser	Phe Va 81		l Ser Pro	Val Cys 815
Pro Arg Pro	Arg Val Ar 820	g Leu Gly	Ser Glu 825	u Ile Arg	y Asp Ser 830	Val Val

<210> 1272 <211> 196 <212> PRT <213> Homo sapiens . <220> <221> SITE <222> (12) , <223> Xaa equals any of the naturally occurring L-amino acids • <220> <221> SITE <222> (22) <223> Xaa equals any of the naturally occurring L-amino acids <220> -<221> SITE <222> (55) <223> Xaa equals any of the naturally occurring L-amino acids <220> . <221> SITE <222> (147) . <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (156) <223> Xaa equals any of the naturally occurring L-amino acids . ·. <220> <221> SITE <222> (184)

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<223> Xaa equals any of the naturally occurring L-amino acids <400> 1272 Met Gly Lys Trp Lys Glu Ser Leu Gln Asn Ala Xaa His Leu Pro Pro 5 10 Ile Leu Leu Arg Xaa Ile His Leu Phe Cys Ala Val Leu Ala Gly 20 25 . 30 Gly Lys Glu Asn Gly Gln Met Ala Val Ser Asp Gly Ser Val Lys Gly 35 40 Leu Leu Ser Val Val Arg Xaa Trp Ser Arg Gly Pro Ala Pro Asp Pro 50 55 60 Cys Leu Val Pro Leu Ala Leu Glu Ala Leu Val Gly Ala Val His Val · · 75 65 70 80 Leu His Ala Ser Arg Ala Pro Pro Arg Gly Pro Glu Leu Arg Ala Leu 85 90 95 Leu Glu Ser Tyr Phe His Val Leu Asn Ala Asp Trp Pro Ala Gly Leu 100 105 . ` 110 Ser Ser Gly Pro Glu Glu Ala Leu Val Thr Leu Arg Val Ser Met Leu - 115 . 120 125 Asp Ala Ile Pro Met Met Leu His Val Lys Thr Gly Gln Cys Leu Gln 130 135 140 Pro Pro Xaa Ser Ala Thr Ile Ala Leu Asn Thr Xaa Leu Gly Ser Phe 145 150 155 ·160 Lys Asn Lys Gln Gly Ser Trp Thr Lys Thr Gln Thr His Cys Ser Pro 165 170 175 Cys Ser Gln Ser Ala Asp Leu Xaa His Glu Val Thr Pro Leu Gly Pro 180 185 190 · Arg Arg Trp Leu 195

<210> 1273 <211> 347 <212> PRT <213> Homo sapiens

<400> 1273
Met Ser Ser Trp Ser Arg Gln Arg Pro Lys Ser Pro Gly Gly Ile Gln
1 5 10 15
Pro His Val Ser Arg Thr Leu Phe Leu Leu Leu Leu Ala Ala Ser
20 25 30
Ala Trp Gly Val Thr Leu Ser Pro Lys Asp Cys Gln Val Phe Arg Ser
35 40 45
Asp His Gly Ser Ser Ile Ser Cys Gln Pro Pro Ala Glu Ile Pro Gly

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	50					55					60				
Tyr 65	Leu	Pro	Ala	Asp	Thr 70	Val	His	Leu	Ala	Val <sup>.</sup> 75	Glu	Phe	Phe	Asn	Leu 80
Thr	His	Leu	Pro	Ala 85	Asn	Leu	Leu	Gln	Gly 90	Ala	Ser	Lys	Leu	Gln 95	Glu
Leu	His	Leu	Ser 100	Ser	Asn	Gly	Leu	Glu 105	Ser	Leu	Ser	Pro	Glu 110	Phe	Leu
Arg	Pro	Val 115	Pro	Gln	Leu	Arg	Val 120	Leu	Asp	Leu		Arg 125	Asn	Ala	Leu
Thr	Gly 130	Leu	Pro	Ser	Gly	Leu 135	Phe	Gln	Ala	Ser	Ala 140		Leu	Asp	Thr
Leu 145	Val	Leu	Lys	Glu	Asn 150	Gln	Leu	Glu	Val	Leu 155	Glu	Val	Ser	Trp	Leu 160
His	Gly	Leu	Lys	Ala 165	Leu.	Gly	His	Leu	Asp 170	Leu	Ser	Gly	Asn	Arg 175	Leu
Arg	Lys	Leu	Pro. 180	Prọ	Gly	Leu	Leu	Ala 185	Asn	Phe	Thr	Leu	Leu 190	Arg	Thr
Leu	Asp	Leu 195	Gly	Glu	Asn	Gln	Leu 200	Glu	Thr	Leu	Pro	Pro 205	Asp	Leu	Leu
Arg	Gly 210	Pro	Leu	Gln	Leu	Glu 215	Arg	Leu	His	Leu	Glu 220	Gly	Asn	Lys	Leu
Gln 225	Val	Leu	Gly	Lys	Asp 230	Leu	Leu	Leu	Pro	Gln 235	Pro	Asp	Leu	Arg	Tyr 240
Leu	Phe	Leu	Asn'	Gly 245	Asn	Lys	Leu	Ala	Arg 250	Val	Ala	Ala	Gly	Ala 255	Phe
Gln	Gly	Leu	Arg 260	Gln	Leu	Asp	Met	Leu 265	Asp	Leu	Ser	Asn	Asn 270	Ser	Leu
Ala	Ser	Val 275	Pro	Glu	Gly	Leu	Trp 280	Ala	Ser	Leu	Gly	Gln 285	Pro	Asn	Trp
Asp	Met 290	Arg	Asp	Gly	Phe	Asp 295	Ile	Ser	Gly	Asn	Pro 300	Trp	Ile	Cys	Asp
Gln 305	Asn	Leu	Ser	Asp	Leu 310	Tyr.	Arg	Trp	Leu	Gln 315	Ala	Gln	Lys	Asp	Lys 320
Met	Phe	Ser	Gln	Asn 325	Asp	Thr	Arg	Суз	Ala 330	Gly	Pro	Glu	Ala	Val 335	Lys
.Gly	Gln		Leu 340	Leu	Ala	Val	Ala	Lys 345		Gln					

<210> 1274 <211> 347 .

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<212> PRT <213> Homo sapiens <400> 1274 Met Ser Ser Trp Ser Arg Gln Arg Pro Lys Ser Pro Gly Gly Ile Gln 1 5 1.0 15 Pro His Val Ser Arg Thr Leu Phe Leu Leu Leu Leu Leu Ala Ala Ser 20 25 30 . . Ala Trp Gly Val Thr Leu Ser Pro Lys Asp Cys Gln Val Phe Arg Ser 35 40 Asp His Gly Ser Ser Ile Ser Cys Gln Pro Pro Ala Glu Ile Pro Gly 50 55 60 Tyr Leu Pro Ala Asp Thr Val His Leu Ala Val Glu Phe Phe Asn Leu 70 75 80 Thr His Leu Pro Ala Asn Leu Leu Gln Gly Ala Ser Lys Leu Gln Glu 85 · 90 • • 95 Leu His Leu Ser Ser Asn Gly Leu Glu Ser Leu Ser Pro Glu Phe Leu 100 105 110 Arg Pro Val Pro Gln Leu Arg Val Leu Asp Leu Thr Arg Asn Ala Leu 115 120 125 Thr Gly Leu Pro Ser Gly Leu Phe Gln Ala Ser Ala Thr Leu Asp Thr 130 . 135 140 Leu Val Leu Lys Glu Asn Gln Leu Glu Val Leu Glu Val Ser Trp Leu 145. 150 155 • 160 His Gly Leu Lys Ala Leu Gly His Leu Asp Leu Ser Gly Asn Arg Leu 165 170 175 Arg Lys Leu Pro Pro Gly Leu Leu Ala Asn Phe Thr Leu Leu Arg Thr 180 185 . Leu Asp Leu Gly Glu Asn Gln Leu Glu Thr Leu Pro Pro Asp Leu Leu 195 200 · 205 Arg Gly Pro Leu Gln Leu Glu Arg Leu His Leu Glu Gly Asn Lys Leu 210 215 220 Gln Val Leu Gly Lys Asp Leu Leu Leu Pro Gln Pro Asp Leu Arg Tyr 225 230 235 . 240 Leu Phe Léu Asn Gly Asn Lys Leu Ala Arg Val Ala Ala Gly Ala Phe . 245 250 255 Gln Gly Leu Arg Gln Leu Asp Met Leu Asp Leu Ser Asn Asn Ser Leu 260 265 . 270 Ala Ser Val Pro Glu Gly Leu Trp Ala Ser Leu Gly Gln Pro Asn Trp . 275 280 285 Asp Met Arg Asp Gly Phe Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp 290 295 300

Gln Asn Leu Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys 305 310 315 320 Met Phe Ser Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys 325 330 · 335 Gly Gln Thr Leu Leu Ala Val Ala Lys Ser Gln 340 345 <210> 1275 <211> 347 <212> PRT <213> Homo sapiens <400> 1275 Met Ser Ser Trp Ser Arg Gln Arg Pro Lys Ser Pro Gly Gly Ile Gln 5 1 10 15 Pro His Val Ser Arg Thr Leu Phe Leu Leu Leu Leu Leu Ala Ala Ser 20 25 \_\_\_\_\_ 30 Ala Trp Gly Val Thr Leu Ser Pro Lys Asp Cys Gln Val Phe Arg Ser 35 40 45 Asp His Gly Ser Ser Ile Ser Cys Gln Pro Pro Ala Glu Ile Pro Gly 50 55 60 Tyr Leu Pro Ala Asp Thr Val His Leu Ala Val Glu Phe Phe Asn Leu 65 70 75 80 Thr His Leu Pro Ala Asn Leu Leu Gln Gly Ala Ser Lys Leu Gln Glu 85 90 95 Leu His Leu Ser Ser Asn Gly Leu Glu Ser Leu Ser Pro Glu Phe Leu 100 105 110 Arg Pro Val Pro Gln Leu Arg Val Leu Asp Leu Thr Arg Asn Ala Leu 115 120 125 Thr Gly Leu Pro Ser Gly Leu Phe Gln Ala Ser Ala Thr Leu Asp Thr 130 135 140 . . Leu Val Leu Lys Glu Asn Gln Leu Glu Val Leu Glu Val Ser Trp Leu 145 150 155 160 His Gly Leu Lys Ala Leu Gly His Leu Asp Leu Ser Gly Asn Arg Leu 165 170 175 Arg Lys Leu Pro Pro Gly Leu Leu Ala Asn Phe Thr Leu Leu Arg Thr 180 185 190 Leu Asp Leu Gly Glu Asn Gln Leu Glu Thr Leu Pro Pro Asp Leu Leu • 195 . 200 205 . Arg Gly Pro Leu Gln Leu Glu Arg Leu His Leu Glu Gly Asn Lys Leu 210 215 220

Gln Val Leu Gly Lys Asp Leu Leu Leu Pro Gln Pro Asp Leu Arg Tyr 225 230 235 240 Leu Phe Leu Asn Gly Asn Lys Leu Ala Arg Val Ala Ala Gly Ala Phe 245 250 255 Gln Gly Leu Arg Gln Leu Asp Met Leu Asp Leu Ser Asn Asn Ser Leu 260 265 270 Ala Ser Val Pro Glu Gly Leu Trp Ala Ser Leu Gly Gln Pro Asn Trp 275 280 285 Asp Met Arg Asp Gly Phe Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp 290 295 300 . Gln Asn Leu Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys 305 310 . 315 320 Met Phe Ser Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys 325 330 . 335 Gly Gln Thr Leu Leu Ala Val Ala Lys Ser Gln 340 345 <210> 1276 <211> 286 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (173) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1276 Met Leu Met Leu Met Leu Met Met Phe Ala Val His Cys Thr Trp 1 5 10 15 . Val Thr Ser Asn Ala Tyr Ser Ser Pro Ser Val Val Leu Ala Ser Tyr 20 25 30 Asn His Asp Gly Thr Arg Asn Ile Leu Asp Asp Phe Arg Glu Ala Tyr 35 40 45 -Phe Trp Leu Arg Gln Asn Thr Asp Glu His Ala Arg Val Met Ser Trp 50 55 . 60 Trp Asp Tyr Gly Tyr Gln Ile Ala Gly Met Ala Asn Arg Thr Thr Leu . 65 70 75 80 Val Asp Asn Asn Thr Trp Asn Asn Ser His Ile Ala Leu Val Gly Lys 85 95 90 Ala Met Ser Ser Asn Glu Thr Ala Ala Tyr Lys Ile Met Arg Thr Leu 110 105 100 Asp Val Asp Tyr Val Leu Val Ile Phe Gly Gly Val Ile Gly Tyr Ser **115** 120 125

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130	Ile Asn		Phe 135	Leu	Trp	Met	Val	Arg 140	Ile	Ala	Glu	Gly
Glu His Pro 145	Lys Asp	Ile 150	Arg	Glu	Ser	Asp	Tyr 155	Phe	Thr	Pro	Gln	Gly 160
Glu Phe Arg	Val Asp 165	Lys	Ala	Gly	Ser	Pro 170	Thr	Leu	Xaa	Asn	Cys 175	Leu
Met Tyr Lys	Met Ser 180	Tyr	Tyr	Arg	Phe 185	Gly	Glu	Met	Gln	Leu 190	Asp	Phe
Arg Thr Pro 195	Pro Gly	Phe	Asp	Arg 200	Thr	Arg	Asn	Ala	Glu 205	Ile	Gly	Asn
Lys Asp Ile 210	Lys Phe		His 215	Leų	Glu	Glu	Ala	Phe 220	Thr	Ser	Glu	His
Trp Leu Val 225 <sup>·</sup>	Arg Ile	Tyr 230	Lys	Val	Lys	Ala	Pro 235	Asp	Asn	Arg	Glu	Thr 240
Leu Asp His	245					250	•		_	•	255	
Leu Ser Lys	Lys Thr 260	Thr	Lys	Arg	Lys 265	Arg	Gly	Tyr	Ile	Lys 270	Asn	Lys
Leu Val Phe 275	Lys Lys	Gly	Lys	Lys 280	Ile	Ser	Lys	Lys	Thr 285	Val		
							•					
<210> 1277 <211> 286 <212> PRT <213> Homo s	sapiens		-									
<211> 286 <212> PRT	-	Leu	Leu	Met	Met	Phe 10	-Ala	Val	His	Сұз	Thr 15	Trp
<211> 286 <212> PRT <213> Homo s	Leu Met		_		Pro	10	•			-	15	-
<211> 286 <212> PRT <213> Homo s <400> 1277 Met Leu Met 1	Leu Met 5 Asn Ala 20	Tyr	Ser	Ser	Pro 25	10 Ser	Val	Val	Leu	Ala 30	15 Ser	Tyr
<211> 286 <212> PRT <213> Homo s <400> 1277 Met Leu Met 1 Val Thr Ser Asn His Asp	Leu Met 5 Asn Ala 20 Gly Thr	Tyr Arg	Ser Asn	Ser Ile 40	Pro 25 Leu	10 Ser · Asp	Val Asp	Val Phe	Leu Arg 45	Ala 30 Glu	15 Ser Ala	Tyr Tyr
<211> 286 <212> PRT <213> Homo s <400> 1277 Met Leu Met 1 Val Thr Ser Asn His Asp 35 Phe Trp Leu	Leu Met 5 Asn Ala 20 Gly Thr Arg Gln	Tyr Arg Asn	Ser Asn Thr 55	Ser Ile 40 Asp	Pro 25 Leu Glu	10 Ser Asp His	Val Asp Ala	Val Phe Arg 60	Leu Arg 45 Val	Ala 30 Glu Met	15 Ser Ala Ser	Tyr Tyr  Trp
<211> 286 <212> PRT <213> Homo s <400> 1277 Met Leu Met 1 Val Thr Ser Asn His Asp 35 Phe Trp Leu 50 Trp Asp Tyr	Leu Met 5 Asn Ala 20 Gly Thr Arg Gln Gly Tyr	Tyr Arg Asn Gln 70 Trp	Ser Asn Thr 55 Ile	Ser Ile 40 Asp Ala	Pro 25 Leu Glu Gly	10 Ser Asp His Met	Val Asp Ala Ala . 75	Val Phe Arg 60 Asn	Leu Arg 45 Val Arg	Ala 30 Glu Met Thr	15 Ser Ala Ser Thr	Tyr Tyr Trp Leu 80

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Asp Val Asp Tyr Val Leu Val Ile Phe Gly Gly Val Ile Gly Tyr Ser 115 120 125 Gly Asp Asp Ile Asn Lys Phe Leu Trp Met Val Arg Ile Ala Glu Gly . 130 135 . 140 Glu His Pro Lys Asp Ile Arg Glu Ser Asp Tyr Phe Thr Pro Gln Gly 145 150 155 160 Glu Phe Arg Val Asp Lys Ala Gly Ser Pro Thr Leu Leu Asn Cys Leu 165 170 175 Met Tyr Lys Met Ser Tyr Tyr Arg Phe Gly Glu Met Gln Leu Asp Phe 180 185 190 Arg Thr Pro Pro Gly Phe Asp Arg Thr Arg Asn Ala Glu Ile Gly Asn 195 200 205 Lys Asp Ile Lys Phe Lys His Leu Glu Glu Ala Phe Thr Ser Glu His 210 215 220 Trp Leu Val Arg Ile Tyr Lys Val Lys Ala Pro Asp Asn Arg Glu Thr 225 230 235 240 Leu Asp His Lys Pro Arg Val Thr Asn Ile Phe Pro Lys Gln Lys Tyr . 245 250 255 Leu Ser Lys Lys Thr Thr Lys Arg Lys Arg Gly Tyr Ile Lys Asn Lys · 260 · ··· 270 ···· 265 Leu Val Phe Lys Lys Gly Lys Lys Ile Ser Lys Lys Thr Val 275 280 285 <210> 1278 <211> 135 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (134) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1278 Met Ser Ala Leu Arg Pro Leu Leu Leu Leu Leu Leu Pro Leu Cys Pro 1 5 10 15 Gly Pro Gly Pro Gly Pro Gly Ser Glu Ala Lys Val Thr Arg Ser Cys 20 . 25 30 Ala Glu Thr Arg Gln Val Leu Gly Ala Arg Gly Tyr Ser Leu Asn Leu • 35 40 45 Ile Pro Pro Ala Leu Ile Ser Gly Glu His Leu Arg Val Cys Pro Gln 50 55 . ' 60 Glu Tyr Thr Cys Cys Ser Ser Glu Thr Glu Gln Arg Leu Ile Arg Glu 65 ् 70 75 80

Thr Glu Ala Thr Phe Arg Gly Leu Val Glu Asp Ser Gly Ser Phe Leu 85 90 95 Val His Thr Leu Ala Ala Arg His Arg Lys Phe Asp Asp Asn Pro Asp 100 105 110 Pro Gly Gly Cys Pro Ser Leu Leu Cys Lys Ala Trp Arg Leu Glu Glu 115 120 125 Met Trp Ser Ser Glu Xaa Ala 130 135 . <210> 1279 <211> 134 <212> PRT <213> Homo sapiens <400> 1279 Met Ser Ala Leu Arg Pro Leu Leu Leu Leu Leu Leu Pro Leu Cys Pro 1 5 10 15 Gly Pro Gly Pro Gly Pro Gly Ser Glu Ala Lys Val Thr Arg Ser Cys 20 . 25 30 Ala Glu Thr Arg Gln Val Leu Gly Ala Arg Gly Tyr Ser Leu Asn Leu 35 40 45 ----. Ile Pro Pro Ala Leu Ile Ser Gly Glu His Leu Arg Val Cys Pro Gln 50 55 · . 60 Glu Tyr Thr Cys Cys Ser Ser Glu Thr Glu Gln Arg Leu Ile Arg Glu 65 70 75 80 Thr Glu Ala Thr Phe Arg Gly Leu Val Glu Asp Ser Gly Ser Phe Leu 85 90 95 Val His Thr Leu Ala Ala Arg His Arg Lys Phe Asp Asp Asn Pro Asp 100 105 . 110 Pro Gly Gly Cys Pro Ser Leu Cys Ala Gly Pro Gly Asp Trp Lys Lys 120 125 115 Cys Gly Gln Arg Cys Ala 130 <210> 1280 · <211> 52 <212> PRT . <213> Homo sapiens

<220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids.

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<220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids • • • <400> 1280 Cys Ala Leu Xaa Phe Glu Phe Phe Phe Phe Phe Phe Leu Arg Trp 1 5 10 15 Ser Leu Gly Asn Lys Ala Arg Leu Xaa Gln Lys Lys Lys Lys Lys . 20 25 30 . Lys Thr Ser Val Gly Lys Asn Met Glu Asn Trp Asn Pro Asp Thr Leu . 35 40 45 Leu Val Gly Leu 50 <210> 1281 <211> 17 . <212> PRT <213> Homo sapiens <400> 1281 Met Arg Val Val Ser Gly Thr Leu Phe Ile His Phe Leu Val Leu Ile . 5 10 15 1 Phe <210> 1282 <211> 17 <212> .PRT <213> Homo sapiens <400> 1282 Met Arg Val Val Ser Gly Thr Leu Phe Ile His Phe Leu Val Leu Ile 5 1 10 15 . Phe <210> 1283 <211> 182 <212> PRT <213> Homo sapiens <400> 1283 Met Ala Lys Arg Ser Arg Gly Pro Gly Arg Arg Cys Leu Leu Ala Leu 1. 5 10 15 Val Leu Phe Cys Ala Trp Gly Thr Leu Ala Val Val Ala Gln Lys Pro . 30 20 25 .

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Gly Ala Gly Cys Pro Ser Arg Cys Leu Cys Phe Arg Thr Thr Val Arg 35 40 45 Cys Met His Leu Leu Leu Glu Ala Val Pro Ala Val Ala Pro Gln Thr 50 55 60 Ser Ile Leu Asp Leu Arg Phe Asn Arg Ile Arg Glu Ile Gln Pro Gly 70 65 75 . 80 Ala Phe Arg Arg Leu Arg Asn Leu Asn Thr Leu Leu Leu Asn Asn Asn 85 90 . 95 · . Gln Ile Lys Arg Ile Pro Ser Gly Ala Phe Glu Asp Leu Glu Asn Leu 100 105 110 . Lys Tyr Leu Tyr Leu His Phe Asn Gln Ile Glu Thr Leu Asp Pro Asp ---- *r1*e 115 120 125 Ser Phe Gln His Leu Pro Lys Leu Glu Arg Leu Phe Leu His Asn Asn · 130 135 140 Arg Ile Thr His Leu Val Pro Gly Thr Phe Asn His Leu Glu Ser Met 145 150 ' 155 160 Lys Arg Leu Arg Leu Asp Ser Asn Thr Leu His Cys Asp Cys Glu Ile 165 170 . 175 Leu Trp Leu Arg Ile Cys 180 <210> 1284 <211> 550 <212> PRT <213> Homo sapiens <400> 1284 Ala Leu Pro Gln Gln Ala Ala Val Ala Gly Ile Val Gln Arg Ser Gly 1 5 . 10 Lys Pro Leu Leu Pro Phe Ala Thr Gly Pro Pro Thr Glu Cys Met Arg · 20 25 30 Asp Glu Asn Glu Ser Pro Ile Pro Cys Phe Leu Ala Gly Asp His Arg 35 40 . 45 · . . Ala Asn Glu Gln Leu Gly Leu Thr Ser Met His Thr Leu Trp Phe Arg 50 55 . 60 Glu His Asn Arg Ile Ala Thr Glu Leu Leu Lys Leu Asn Pro His Trp 70 65 75 80 Asp Gly Asp Thr Ile Tyr Tyr Glu Thr Arg Lys Ile Val Gly Ala Glu 90 85 95 Ile Gln His Ile Thr Tyr Gln His Trp Leu Pro Lys Ile Leu Gly Glu 100 105 . 110Val Gly Met Arg Thr Leu Gly Glu Tyr His Gly Tyr Asp Pro Gly Ile

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			115					120					125			
	Asn	Ala 130	Gly	Ile	Phe	Asn	Ala 135	Phe	Ala	Thr	Ala	Ala 140	Phe	Arg	Phe	Gly
· -	HİS 145	Thr	Leu	Val	Asn	Pro 150	Leu	Leu	Tyr	Arg	Leu 155	Asp	Glu	Asn	Phe	Gln 160 ·
	Pro	Ile	Ala	Gln	Asp 165	His	Leu	Pro	Leu	His 170	Lys	Ala	Phe	Phe	Ser 175	Pro
	Phe	Årg	Ile	Val 180	Asn	Glu	Gly	Gly	Ile 185	Asp	Pro	Leu	Leu	Arg 190	Gly	Leu
	Phe	Gły	Val 195	Ala	Gly	Lys	Met	Arg 200	Val	Pro	Ser	Gln	Leu 205	Leu	Asn	Thr
	Glu	Leu 210	Thr	Glu	Arg	Leu	Phe 215	Ser	Met	Ala	His	Thr 220	Val	Ala	Leu	Asp
	Leu 225	Ala	Ala	Ile	Asn	Ile 230	Gln	Arg	Gly	Arg	Asp 235	His	Gly	Ile	Pro	Pro 240 ·
	Tyr	His	Asp	Tyr	Arg 245	Val	Tyr	Cys		Leu 250	Ser	Ala	Ala	His	Thr 255	Phe
	Glu	Asp	Leu	Lys 260	Asn	Glu	Ile	Lys	Asn 265	Pro	Glu	Ile	Arg	Glu 270	Lys	Leu
	Lys	Arg	Leu 275	Tyr	Gly	Ser	Thr	Leu 280	Asn	Ile	Asp	Leu	Phe 285		Ala	Leu
	Val	Val 290	Glu	Asp	Leu	Val	Pro 295	Gly	Ser	Arg	Leu	Gly 300	Pro	Thr	Leu	Met
	Cys 305	Leu	Leu	Ser	Thr	Gln 310	Phe	Lys	Arg	Leu	Arg 315	Asp	Gly	Asp	Arg	Leu 320
	Trp	Tyr	Glu	Asn	Pro 325	Gly	Vål	Phe	Ser	Pro 330	Ala	Gln	Leu	. Thr	Gln 335	Ile
	Lys	Gln	Thr	Ser 340	Leu	Ala	Arg	Ile	Leu 345	Cys	Asp	Asn		Asp 350	Asn	Ile
	Thr		Val 355		Ser	Asp	Val	Phe 360	Arg	Val	Ala	Glu	Phe 365	Pro	His	Gly
	Ťyr	Gly 370	Ser	Cys	Asp	Glu	Ile 375	Pro	Arg	Val	Asp	Leu 380	Arg	Val	Trp	Gln
	Asp 385	Cys	Cys	Glu	Asp	Cys 390	Arg	Thr	Arg	Gly	Gln 395	Phe	Asn	Ala	Phe	Ser 400
•	Tyr	His	Phe	Arg	Gly 405	Arg	Arg	Ser	Leu	Glu 410	Phe	Ser	Tyr	Gln	Glu 415	Asp
	Lys	Pro	Thr	Lys 420	Lys	Thr	Arg	Pro	Arg 425	Lys	Ile	Pro	Ser	Val 430	Gly	Arg
	Gln	Gly	Glu	His	Leu	Ser	Asn	Ser		Ser	Ala	Phe	Ser	Thr	Arg	Ser

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. 445 440 435 · Asp Ala Ser Gly Thr Asn Asp Phe Arg Glu Phe Val Leu Glu Met Gln 450 455 460 Lys Thr Ile Thr Asp Leu Arg Thr Gln Ile Lys Lys Leu Glu Ser Arg 465 470 475 480 Leu Ser Thr Thr Glu Cys Val Asp Ala Gly Gly Glu Ser His Ala Asn 485 490 495 Asn Thr Lys Trp Lys Lys Asp Ala Cys Thr Ile Cys Glu Cys Lys Asp 500 505 510 Gly Gln Val Thr Cys Phe Val Glu Ala Cys Pro Pro Ala Thr Cys Ala 515 520 525 Val Pro Val Asn Ile Pro Gly Ala Cys Cys Pro Val Cys Leu Gln Lys 530 535 540 Arg Ala Glu Glu Lys Pro 545 550 <210> 1285 <211> 210 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (139) <223> Xaa equals any of the naturally occurring L-amino acids · <220> <221> SITE <222> (187) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1285 Met Glu Ala Pro Gly Pro Arg Ala Leu Arg Thr Ala Leu Cys Gly Gly . 1 . 5 10 15 Cys Cys Cys Leu Leu Cys Ala Gln Leu Ala Val Ala Gly Lys Gly 20 \_ 25 30 Ala Arg Gly Phe Gly Arg Gly Ala Leu Ile Arg Leu Asn Ile Trp Pro 35 40 45 Ala Val Gln Gly Ala Cys Lys Gln Leu Glu Val Cys Glu His Cys Val 50 55 60 Glu Gly Asp Arg Ala Arg Asn Leu Ser Ser Cys Met Trp Glu Gln Cys 70 75 80 65 Arg Pro Glu Glu Pro Gly His Cys Val Ala Gln Ser Glu Val Val Lys 85 90 95 Glu Gly Cys Ser Ile Tyr Asn Arg Ser Glu Ala Cys Pro Ala Ala His

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			100					105					110			
His	His	Pro 115	Thr	Tyr <sub>.</sub>	Glu	Pro	Lys 120	Thr	Val	Thr	Thr	Gly 125	Ser	Pro	Pro	
. Val	Pro 130	Glu	Ala	His	Ser	Pro 135	Gly	Phe	Asp	Xaa	Ala 140	Ser	Phe	Ile	Gly	
Gly 145		Val	Leu	Val	Leu 150	Ser	Leu	Gln	Ala	Val 155	Ala	Phe	Phe	Val	Leu 160	
Thr	Ser	Ser	Arg	Pro 165	Arg	Thr	Ala	Pro	Thr 170	Arg	Arg	Суз	Glu	Tyr 175	Leu	
Ala	Ser	Ser	Lys 180	Tyr	Leu	Ser	Pro	Ser 185	Ser	Xaa	Leu	Val	Pro 190	Ala	His	
Val	Pro	Phe 195	Ser	Thr	Gln	Gly	Ala 200	Val	Phe	Ser	Thr	Gly 205	Lys	Pro	Ser	•
Gly	Arg 210														·	
															•	
<21 <21	0> 12 1> 17 2> PH 3> Ho	73 RT	sapie	ens						-						
<40	0> 12	286			•											
			Pro	Gly · 5	Pro	Arg	Ala	Leu	Arg 10	Thr	Ala	Leu	Суз	Gly 15	Gly	
Met 1	Glu	Ala		• 5	Pro Leu				10					15		
Met 1 Cys	Glu Cys	Ala Cys	Leu 20	· 5 Leu	-	Cys	Ala <sub>.</sub>	Gln 25	10 Leu	Ala	Val	Ala	Gly 30	15 Lys	Gly	
Met 1 Cys Ala	Glu Cys Arg	Ala Cys Gly 35	Leu 20 Phe	· 5 Leu Gly	Leu	Cys Gly	Ala Ala 40	Gln 25 Leu	10 Leu Ile	Ala Arg	Val Leu	Ala Asn 45	Gly 30 Ile	15 Lys Trp	Gly Pro	
Met 1 Cys Ala Ala	Glu Cys Arg Val 50	Ala Cys Gly 35 Gln	Leu 20 Phe Gly	· 5 Leu Gly Ala	Leu Arg	Cys Gly Lys 55	Ala Ala 40 Gln	Gln 25 Leu Leu	10 Leu Ile Glu	Ala Arg Val	Val Leu Cys 60	Ala Asn 45 Glu	Gly 30 Ile His	15 Lys Trp Cys	Gly Pro Val	
Met 1 Cys Ala Ala Glu 65	Glu Cys Arg Val 50 Gly	Ala Cys Gly 35 Gln Asp	Leu 20 Phe Gly Arg	· 5 Leu Gly Ala Ala	Leu Arg Cys Arg	Cys Gly Lys 55 Asn	Ala Ala 40 Gln Leu	Gln 25 Leu Leu Ser	10 Leu Ile Glu Ser	Ala Arg Val Cys 75	Val Leu Cys 60 Met	Ala Asn 45 Glu Trp	Gly 30 Ile His Glu	15 Lys Trp Cys Gln	Gly Pro Val Cys 80	-
Met 1 Cys Ala Ala Glu 65	Glu Cys Arg Val 50 Gly Pro	Ala Cys Gly 35 Gln Asp Glu	Leu 20 Phe Gly Arg Glu	5 Leu Gly Ala Ala Pro 85	Leu Arg Cys Arg 70 Gly	Cys Gly Lys 55 Asn His	Ala Ala 40 Gln Leu Cys	Gln 25 Leu Leu Ser Val	10 Leu Ile Glu Ser Ala 90	Ala Arg Val Cys 75 Gln	Val Leu Cys 60 Met Ser	Ala Asn 45 Glu Trp Glu	Gly 30 Ile His Glu Val	15 Lys Trp Cys Gln Val 95	Gly Pro Val Cys 80 Lys	
Met 1 Cys Ala Ala Glu 65 Arg Glu	Glu Cys Arg Val 50 Gly Pro Gly	Ala Cys Gly 35 Gln Asp Glu Cys	Leu 20 Phe Gly Arg Glu Ser 100	5 Leu Gly Ala Ala Pro 85 Ile	Leu Arg Cys Arg 70 Gly	Cys Gly Lys 55 Asn His Asn Pro	Ala 40 Gln Leu Cys Arg	Gln 25 Leu Leu Ser Val Ser 105	10 Leu Ile Glu Ser Ala 90 Glu	Ala Arg Val Cys 75 Gln Ala	Val Leu Cys 60 Met Ser Cys	Ala Asn 45 Glu Trp Glu Pro	Gly 30 Ile His Glu Val Ala 110	15 Lys Trp Cys Gln Val 95 Ala	Gly Pro Val Cys 80 Lys His	-
Met 1 Cys Ala Ala Glu 65 Arg Glu His	Glu Cys Arg Val 50 Gly Pro Gly His	Ala Cys Gly 35 Gln Asp Glu Cys Pro 115	Leu 20 Phe Gly Arg Glu Ser 100 Thr	5 Leu Gly Ala Ala Pro 85 Ile Tyr	Leu Arg Cys Arg 70 Gly Tyr	Cys Gly Lys 55 Asn His Asn Pro	Ala 40 Gln Leu Cys Arg Lys 120	Gln 25 Leu Leu Ser Val Ser 105 Thr	10 Leu Ile Glu Ser Ala 90 Glu Val	Ala Arg Val Cys 75 Gln Ala Thr	Val Leu Cys 60 Met Ser Cys Thr	Ala Asn 45 Glu Trp Glu Pro Gly 125	Gly 30 Ile His Glu Val Ala 110 Ser	15 Lys Trp Cys Gln Val 95 Ala Pro	Gly Pro Val Cys 80 Lys His Pro	- ·

745

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His Phe Leu Lys Ala Lys Asp Ser Thr Tyr Gln Thr Leu 165 170

<210> 1287 <211> 148 <212> PRT <213> Homo sapiens <400> 1287 Met Thr Trp Lys Ile Lys Leu Arg Ser Ala Val Tyr Leu Ser Asp Ala 1 5 10 15 Thr Val Thr Thr Leu Gly Asn Leu Val Pro Phe Thr Leu Thr Leu Leu 20 25 30 Cys Phe Leu Leu Ile Cys Ser Leu Cys Lys His Leu Lys Lys Met 35 40 45 Gln Leu His Gly Lys Gly Ser Gln Asp Pro Ser Thr Lys Val His Ile 50 55, 60 Lys Val Leu Gln Thr Val Ile Phe Phe Leu Leu Cys Ala Ile Tyr 65 70 75 80 . Phe Leu Ser Ile Met Ile Ser-Val Trp Ser Phe Gly Ser Leu Glu Asn 85 90 95 Lys Pro Val Phe Met Phe Cys Lys Ala Ile Arg Phe Ser Tyr Pro Ser 100 105 110 Ile His Pro Phe Ile Leu Ile Trp Gly Asn Lys Lys Leu Lys Gln Thr 115 120 125 Phe Leu Ser Val Leu Arg Gln Val Arg Tyr Trp Val Lys Gly Glu Lys 130 135 140 Pro Ser Ser Pro 145 <210> 1288 <211> 55 <212> PRT <213> Homo sapiens <400> 1288 Asn Glu Arg Val Leu Thr Tyr Ser Leu Ile Gly Ser Ser Ile Ile Arg 1 5 10 15 Lys Lys Cys Thr Val Leu Phe Thr Ala Lys Phe Tyr Leu Thr Val Leu 30 20 25 Ile Leu Gly Val Met Lys Phe Lys Gln Cys Asp Leu Asn Leu Lys Lys 35 40 45 Lys Lys Lys Lys Gly Arg Pro

746

55 50 <210> 1289 <211> 273 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (200) <223> Xaa equals any of the naturally occurring L-amino acids · .. <400> 1289 Met Arg Leu Pro Gly Val Pro Leu Ala Arg Pro Ala Leu Leu Leu 1 5 -. 10 15 Leu Pro Leu Leu Ala Pro Leu Leu Gly Thr Gly Ala Pro Ala Glu Leu , 30 20 25 · Arg Val Arg Val Arg Leu Pro Asp Gly Gln Val Thr Glu Glu Ser Leu 35 40 45 Gln Ala Asp Ser Asp Ala Asp Ser Ile Ser Leu Glu Leu Arg Lys Pro 50 55 60 . Asp Gly Thr Leu Val Ser Phe Thr Ala Asp Phe Lys Lys Asp Val Lys 70 65 • 75 80 Val Phe Arg Ala Leu Ile Leu Gly Glu Leu Glu Lys Gly Gln Ser Gln 85 90 95 Phe Gln Ala Leu Cys Phe Val Thr Gln Leu Gln His Asn Glu Ile Ile 100. 105 110 Pro Ser Glu Ala Met Ala Lys Leu Arg Gln Lys Asn Pro Arg Ala Val 115 120 125 Arg Gln Ala Glu Glu Val Arg Gly Leu Glu His Leu His Met Asp Val 130 135 140 Ala Val Asn Phe Ser Gln Gly Ala Leu Leu Ser Pro His Leu His Asn 145 150 155 160 Val Cys Ala Glu Ala Val Asp Ala Ile Tyr Thr Arg Gln Glu Asp Val 165 170 175 Arg Phe Trp Leu Glu Gln Gly Val Asp Ser Ser Val Phe Glu Ala Leu 185 180 190 . Pro Lys Ala Ser Glu Gln Ala Xaa Leu Pro Arg Cys Arg Gln Val Gly 195 200 205 Asp Arg Gly Lys Pro Cys Val Cys His Tyr Gly Leu Ser Leu Ala Trp 210 215 220 Tyr Pro Cys Met Leu Lys Tyr Cys His Ser Arg Asp Arg Pro Thr Pro 225 230 235 240

Tyr Lys Cys Gly Ile Arg Ser Cys Gln Lys Ser Tyr Ser Phe Asp Phe 245 250 255 Tyr Val Pro Gln Arg Gln Leu Cys Leu Trp Asp Glu Asp Pro Tyr Pro 260 265 270 Gly <210> 1290 <211> 273 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (217) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1290 . Met Arg Leu Pro Gly Val Pro Leu Ala Arg Pro Ala Leu Leu Leu 1 5. 10 15 Leu Pro Leu Leu Ala Pro Leu Leu Gly Thr Gly Ala Pro Ala Glu Leu 20 25 30 Arg Val Arg Val Arg Leu Pro Asp Gly Gln Val Thr Glu Glu Ser Leu 35 40 45 . Gln Ala Asp Ser Asp Ala Asp Ser Ile Ser Leu Glu Leu Arg Lys Pro 50 55 . 60 Asp Gly Thr Leu Val Ser Phe Thr Ala Asp Phe Lys Lys Asp Val Lys 65 70 75 80 Val Phe Arg Ala Leu Ile Leu Gly Glu Leu Glu Lys Gly Gln Ser Gln 85 90 95 Phe Gln Ala Leu Cys Phe Val Thr Gln Leu Gln His Asn Glu Ile Ile 100 105 110 . . Pro Ser Glu Ala Met Ala Lýs Leu Arg Gln Lys Asn Pro Arg Ala Val 115 120 125 Arg Gln Ala Glu Glu Val Arg Gly Leu Glu His Leu His Met Asp Val . 135 130 140 Ala Val Asn Phe Ser Gln Gly Ala Leu Leu Ser Pro His Leu His Asn . 150 145 155 160 Val Cys Ala Glu Ala Val Asp Ala Ile Tyr Thr Arg Gln Glu Asp Val 165 170 175 Arg Phe Trp Leu Glu Gln Gly Val Asp Ser Ser Val Phe Glu Ala Leu 180 185 190 Pro Lys Ala Ser Glu Gln Ala Glu Leu Pro Arg Cys Arg Gln Val Gly 195 200 205

748

Asp Arg Gly Lys Pro Cys Val Cys Xaa Tyr Gly Leu Ser Leu Ala Trp 210 215 220 . Tyr Pro Cys Met Leu Lys Tyr Cys His Ser Arg Asp Arg Pro Thr Pro 225 230 235 240 Tyr Lys Cys Gly Ile Arg Ser Cys Gln Lys Ser Tyr Ser Phe Asp Phe 245 250 255 Tyr Val Pro Gln Arg Gln Leu Cys Leu Trp Asp Glu Asp Pro Tyr Pro 265 260 270 Gly<sup>.</sup> ۰. . <210> 1291 <211> 934 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (225) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (596) <223> Xaa equals any of the naturally occurring L-amino acids ••• <220> <221> SITE . <222> (852) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1291 Met Leu Ala Gly Cys Phe Leu Leu Ile Leu Gly Gln Ile Val Leu Leu 5 1 10 15 Pro Ala Glu Ala Arg Glu Arg Ser Arg Gly Arg Ser Ile Ser Arg Gly 20 25 30 Arg His Ala Arg Thr His Pro Gln Thr Ala Leu Leu Glu Ser Ser Cys . 35 40 45 Glu Asn Lys Arg Ala Asp Leu Val Phe Ile Ile Asp Ser Ser Arg Ser 50 55 60 Val Asn Thr His Asp Tyr Ala Lys Val Lys Glu Phe Ile Val Asp Ile 65 70 75 80 Leu Gln Phe Leu Asp Ile Gly Pro Asp Val Thr Arg Val Gly Leu Leu 85 · 90 95 . Gln Tyr Gly Ser Thr Val Lys Asn Glu Phe Ser Leu Lys Thr Phe Lys 100 105 110 .

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Arg Lys Ser Glu Val Glu Arg Ala Val Lys Arg Met Arg His Leu Ser · 115 Thr Gly Thr Met Thr Gly Leu Ala Ile Gln Tyr Ala Leu Asn Ile Ala Phe Ser Glu Ala Glu Gly Ala Arg Pro Leu Arg Glu Asn Val Pro Arg 145 . Val Ile Met Ile Val Thr Asp Gly Arg Pro Gln Asp Ser Val Ala Glu ~ Val Ala Ala Lys Ala Arg Asp Thr Gly Ile Leu Ile Phe Ala Ile Gly .180 Val Gly Gln Val Asp Phe Asn Thr Leu Lys Ser Ile Gly Ser Glu Pro His Glu Asp His Val Phe Leu Val Ala Asn Phe Ser Gln Ile Glu Thr Xaa Thr Ser Val Phe Gln Lys Lys Leu Cys Thr Ala His Met Cys Ser Thr Leu Glu His Asn Cys Ala His Phe Cys Ile Asn Ile Pro Gly Ser Tyr Val Cys Arg Cys Lys Gln Gly Tyr Ile Leu Asn Ser Asp Gln Thr Thr Cys Arg Ile Gln Asp Leu Cys Ala Met Glu Asp His Asn Cys Glu . Gln Leu Cys Val Asn Val Pro Gly Ser Phe Val Cys Gln Cys Tyr Ser Gly Tyr Ala Leu Ala Glu Asp Gly Lys Arg Cys Val Ala Val Asp Tyr Cys Ala Ser Glu Asn His Gly Cys Glu His Glu Cys Val Asn Ala Asp Gly Ser Tyr Leu Cys Gln Cys His Glu Gly Phe Ala Leu Asn Pro Asp Glu Lys Thr Cys Thr Lys Ile Asp Tyr Cys Ala Ser Ser Asn His Gly Cys Gln His Glu Cys Val Asn Thr Asp Asp Ser Tyr Ser Cys His Cys Leu Lys Gly Phe Thr Leu Asn Pro Asp Lys Lys Thr Cys Arg Arg Ile . 390 395 Asn Tyr Cys Ala Leu Asn Lys Pro Gly Cys Glu His Glu Cys Val Asn Met Glu Glu Ser Tyr Tyr Cys Arg Cys His Arg Gly Tyr Thr Leu Asp 430 .

	Pro	Asn	Gly 435	Lys	Thr	Cys	Ser	Arg 440	Val	Asp	His	Cys	Ala 445	Gln	Gln	Asp
	His	Gly 450	Cys	Glu	Gln	Leu	Cys 455	Leu	Asn	Thr	Glu	Asp 460	Ser	Phe	Val	Cys
	Gln 465	Cys	Ser	Glu	Gly	Phe 470	Leu	Ile	Asn	Glu	Asp 475	Leu	Lys	Thr	Cys	Ser 480
	Arg	Val	Asp	Tyr	Cys 485	Leu <sub>.</sub>	Leu	Ser	Asp	His 490	Gly	Cys	Glu	Tyr	Ser 495	Cys
	Vaļ	Asn		Asp 500	Arg	Ser	Phe	Ala	Cys 505	Gln	Cys	Pro	Glu	Gly 510	His	Val
	Leu	Arg	Ser 515	Asp	Gly	Lys	Thr	Cys 520	Ala	Lys	Leu	Asp	Ser 525	Cys	Ala	Leu
	Gly	Asp 530	His	Gly	Cys	Glu	His 535	Ser	Cys	Val	Ser	Ser 540	Glu	Asp	Ser	Phe
	Val 545	Cys	Gln	Cys	Phe	Glu 550	Gly	Tyr	Ile	Leu	Arg 555	Glu	Asp	Gly	Lys	Thr 560
	Cys	Arg	Arg	Lys	Asp 565	Val	Cys	Gln	Ala	Ile 570	Asp	His	Gly	Cys	Glu 575	His
	Ile	Cys	Val	Asn 580	Ser	Asp	Asp		Tyr 585	Thr	Cys	Glu	Cys	Leu 590	Glu	Gly
•	Phe	Arg	Leu 595	Xaa	Glu	Asp	Gly	Lys 600	Arg	Cys	Arg	Arg	Lys 605	Asp	Val	Cys
	Lys	Ser 610	Thr	His	His	Gly	Cys 615	Glu	His	Ile	Cys	Val 620	Asn	Asn	Gļy	Asn
	Ser 625	Tyr	Ile	Cys	Lys	Cys 630	Ser	Glu	Gly	Phe	Val 635	Leu	Ala	Glu	Asp	Gly 640
	Arg	Arg <sub>.</sub>	Cys	Lys	Lys. 645	Cys	Thr	Glu	Gly	Pro 650	Ile	Asp	Leu	Val	Phe 655	Val
	Ile	Asp	Gly	Ser 660		Ser	Leu	Gly	Glu 665	Glu	Asn	Phe	Glu	Val 670	Vaļ	Lys
	Gln	Phe	Val 675	Thr	Gly	Ile	Ile	Asp 680	Ser	Leu	Thr		Ser 685	Pro	Lys	Ala
	Ala	Arg 690	Val	Gly	Leu	Leu	Gln 695	Tyr	Ser	Thr	Gln	Val 700	His	Thr	Glu	Phe
	Thr 705	Leu	Arg	Asn	Phe	Asn 710	Ser	Ala	Lys	Asp	Met 715	Lys	Lys	Ala	Val	Ala 720
	His	Met	Lys	Tyr	Met 725	Gly	Lys	Gly	Ser	Met 730 <sup>,</sup>	Thr	Gly	Leu	Ala	Leu 735	Lys
	His	Met	Phe	Glu 740 <sup>.</sup>	Arg	Ser	Phe	Thr	Gln 745	Gly	Glu	Gly	Ala	Arg 750	Pro	Leu

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Ser Thr Arg Val Pro Arg Ala Ala Ile Val Phe Thr Asp Gly Arg Ala 755 760 765 Gln Asp Asp Val Ser Glu Trp Ala Ser Lys Ala Lys Ala Asn Gly Ile 770 775 780 Thr Met Tyr Ala Val Gly Val Gly Lys Ala Ile Glu Glu Glu Leu Gln 790 785 . 795 800 Glu Ile Ala Ser Glu Pro Thr Asn Lys His Leu Phe Tyr Ala Glu Asp 805 810 815 Phe Ser Thr Met Asp Glu Ile Ser Glu Lys Leu Lys Lys Gly Ile Cys 820 825 830 Glu Ala Leu Glu Asp Ser Asp Gly Arg Gln Asp Ser Pro Ala Gly Glu. 835 840 845 Leu Pro Lys Xaa Val Gln Gln Pro Thr Val Gln His Arg Tyr Leu Phe 850 . 855 860 Glu Glu Asp Asn Leu Leu Arg Ser Thr Gln Lys Leu Ser His Ser Thr 870 865 875 880 Lys Pro Ser Gly Ser Pro Leu Glu Glu Lys His Asp Gln Cys Lys Cys 885 890 895 Glu Asn Leu Ile Met Phe Gln Asn Leu Ala Asn Glu Glu Val Arg Lys 900 905 910 Leu Thr Gln Arg Leu Glu Glu Met Thr Gln Arg Met Glu Ala Leu Glu 915 920 925 . Asn Arg Leu Arg Tyr Arg 930

<210> 1292 <211> 794 <212> PRT <213> Homo sapiens

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<400> 1292 Met Leu Ala Gly Cys Phe Leu Leu Ile Leu Gly Gln Ile Val Leu Leu 5 1 . 10 15 Pro Ala Glu Ala Arg Glu Arg Ser Arg Gly Arg Ser Ile Ser Arg Gly  $\alpha$ 20 25 30 Arg His Ala Arg Thr His Pro Gln Thr Ala Leu Leu Glu Ser Ser Cys 35 40 . 45 Glu Asn Lys Arg Ala Asp Leu Val Phe Ile Ile Asp Ser Ser Arg Ser 50 55 60 Val Asn Thr His Asp Tyr Ala Lys Val Lys Glu Phe Ile Val Asp Ile 75 65 70 80 Leu Gln Phe Leu Asp Ile Gly Pro Asp Val Thr Arg Val Gly Leu Leu

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				85					90					95	
Gln	Tyr	Gļy	Ser 100	Thr	Val	Lys	Asn	Glu 105	Phe.	Ser	Leu	Lys	Thr 110	Phe	Lys
Arg	Lys	Ser 115	Glu	Val	Glu	Arg	Ala 120	Val	Lys	Arg	Met	Arg 125	His	Leu	Ser
Thr	Gly 130	Thr	Met	Thr	Gly	Leu 135	Ala	Ile	Gln	Tyr	Ala 140	Leu	Asn	Iĺe	Ala
Phe 145	Ser	Glu	Ala	Glu	Gly 150	Ala	Arg	Pro	Leu	Arg 155	Glu	Asn	Val	Pro	Arg 160
Val	Ile	Met	Ile	Val 165	Thr	Asp	Gly	Arg	Pro 170	Gln	Asp	Ser	Val	Ala 175	Glu <sub>.</sub>
Val	Ala	Ala	Lys 180	Ala	Arģ	Asp	Thr	Gly 185	Ile	Leu	Ile	Phe	Ala 190	Ile	Gly
Val	Gly	Gln 195	Val	Asp	Phe	Asn	Thr 200	Leu	Lys	Ser	Ile	Gly 205	Ser	Glu	Pro
His	Glu 210	Àsp	His	Val	Phe	Leu 215	Val	Ala	Asn		Ser 220		Ile	Glu	Thr
Leu 225	Thr	Ser	Val	Phe	G1n 230	Lys	Lys	Leu	Cys	Thr 235	Ala	His	Met	Cys	Ser 240
Thr	Leu	Glu	His	Asn 245	Cys	Ala	His	Phe	Cys 250	Ile	Asn	Ile	Pro	Gly 255	Ser
Tyr	Val	Cys	Arg 260	Cys	ГЛЗ	Gln	Gly	Tyr 265	Ile	Leu	Asn	Ser	Asp 270	Gln	Thr
Thr	Cys	Arg 275		Gln	Asp	Leu	Cys 280	Ala.	Met	Glu	Asp	His 285	Asn	Cys	Glu
Gln	Leu 290	Суз	Val	Asn	Val	Pro 295	Gly	Ser	Phe	Val	Cys 300	Gln	Cys	Tyr	Ser
Gly 305	Tyr	Ala	Leu		Glu 310	Asp	Gly	Lys	Arg	Cys 315	Val	Ala	Val	Asp	Tyr 320
Cys	Ala	Ser	Glu	Asn 325	His	Gly	Cys		His 330	Glu	Cys	Val	Asn	Ala 335	Asp
Gly	Ser	Tyr	Leu 340	Cys	Gln	Cys	His	Glu 345	Gly	Phe	Ala	Leu	Asn 350	Pro	Asp
Glu	Lys	Thr 355	Cys	Thr	Lys	Ile	Asp 360	Tyr	Cys	Ala	Ser	Ser 365	Asn	His	Gly
Cys	Gln 370	His	Glu	Cys	Val	Asn 375	Thr	Asp	Asp	Ser	Tyr 380		Cys	His	Cys
Leu 385	Lys	Gly	Phe	Thr	Leu 390	Asn	Pro	Asp	Lys	Lys 395	Thr	Cys	Arg	Arg	Ile 400
Asn	Tyr	Cys	Ala	Leu	Asn	Lys	Pro	Gly	Cys	Glu	His	Glu	Cys	Val	Asn

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	405	410		415
Met Glu Glu Ser 420	Tyr Tyr Cys	Arg Cys His 425	Arg Gly Tyr Th 43	-
Pro Asn Gly Lys 435	Thr Cys Ser	Arg Val Asp 440	His Cys Ala G 445	ln Gln Asp
His Gly Cys Glu 450	Gln Leu Cys 455	Leu Asn Thr	Glu Asp Ser Pl 460	ne Val Cys
Gln Cys Ser Glu 465	Gly Phe Leu 470	Ile Asn Glu	Asp Leu Lys Th 475	nr Cys Ser 480
Arg Val Asp Tyr	Cys Leu Leu 485	Ser Asp His 490	Gly Cys Glu Ty	r Ser Cys 495
Val Asn Met Asp 500	Arg Ser Phe	Ala Cys Gln 505	Cys Pro Glu Gl 51	
Leu Arg Ser Asp 515	Gly Lys Thr	Cys Ala Lys 520	Leu Asp Ser Cy 525	ys Ala Leu
Gly Asp His Gly 530	Cys Glu His 535	Ser Cys Val	Ser Ser Glu As 540	sp Ser Phe
Val Cys Gln Cys 545	Phe Glu Gly 550	Tyr Ile Leu	Arg Glu Asp GJ 555	y Lys Thr 560
Cys Arg Arg Lys	Asp Val Cys 565	Gln Ala Ile 570	Asp His Gly Cy	rs Glu His 575
Ile Cys Val Asn 580	Ser Asp Asp	Ser Tyr Thr . 585	Cys Glu Cys Le 59	
Phe Arg Leu Ala 595	Glu Asp Gly	Lys Arg Cys 600	Arg Arg Lys As 605	sp Val Cys
Lys Ser Thr His 610	His Gly Cys 615	Glu His Ile	Cys Val Asn As 620	an Gly. Asn
Ser Tyr Ile Cys 625	Lys Cys Ser 630	Glu Gly Phe	Val Leu Ala Gi 635	u Asp Gly 640
'Arg Arg Cys Lys	Lys Cys Thr 645	Glu Gly Pro 650	Ile Asp Leu Va	al Phe Val 655
Ile Asp Gly Ser 660	Lys Ser Leu	Gly Glu Glu 665	Asn Phe Glu Va 67	-
Gln Phe Val Thr 675	Gly Ile Ile	Asp Ser Leu 680	Thr Ile Ser Pr 685	co Lys Ala
Ala Arg Val Gly 690	Leu Leu Gln 695	Tyr Ser Thr	Gln Val His Th 700	ır Glu Phe
Thr Leu Arg Asn 705	Phe Asn Ser 710	Ala Lys Asp	Met Lys Lys Al 715	la Val Ala 720
His Met Lys Tyr	Met Gly Lys	Gly Ser Met	Thr Gly Leu Al	la Leu Lys

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725 730 735 His Met Phe Glu Arg Ser Phe Thr Gln Gly Glu Gly Ala Arg Pro Leu 745 740 750 Ser Thr Arg Val Pro Arg Ala Ala Ile Val Phe Thr Asp Gly Arg Ala 755 760 765 ۰. Gln Asp Asp Val Ser Glu Trp Ala Ser Lys Ala Arg Pro Trp Tyr His 770 . 775 . 780 • Tyr Val Cys Cys Trp Gly Arg Lys Ser His 785 · 790 . <210> 1293 <211> 39 <212> PRT <213> Homo sapiens <400> 1293 Met Arg Arg Pro Ala Ala Val Pro Leu Leu Leu Leu Cys Phe Gly 1 5 10 .15 Ser Gln Arg Ala Lys Ala Ala Thr Ala Cys Gly Arg Pro Arg Met Leu 20 25 30 Asn Arg Met Val Gly Gly Gln 35 . <210> 1294 <211> 290 <212> PRT <213> Homo sapiens · <400> 1294 Met Arg Arg Pro Ala Ala Val Pro Leu Leu Leu Leu Cys Phe Gly 5 -10 1 15 · Ser Gln Arg Ala Lys Ala Ala Thr Ala Cys Gly Arg Pro Arg Met Leu 25 · 30 · 20 Asn Arg Met Val Gly Gly Gln Asp Thr Gln Glu Gly Glu Trp Pro Trp 35 40 45 . Gln Val Ser Ile Gln Arg Asn Gly Ser His Phe Cys Gly Gly Ser Leu 50 · 55 60 Ile Ala Glu Gln Trp Val Leu Thr Ala Ala His Cys Phe Arg Asn Thr 65 70 75 . 80 Ser Glu Thr Ser Leu Tyr Gln Val Leu Leu Gly Ala Arg Gln Leu Val . 90 · 85 . 95 Gln Pro Gly Pro His Ala Met Tyr Ala Arg Val Arg Gln Val Glu Ser 100 105 . 110

Asn Pro Leu Tyr Gln Gly Thr Ala Ser Ser Ala Asp Val Ala Leu Val 115 120 125 Glu Leu Glu Ala Pro Val Pro Phe Thr Asn Tyr Ile Leu Pro Val Cys 135 140 130 Leu Pro Asp Pro Ser Val Ile Phe Glu Thr Gly Met Asn Cys Trp Val 145 150 155 160 Thr Gly Trp Gly Ser Pro Ser Glu Glu Asp Leu Leu Pro Glu Pro Arg 165 170 175 Ile Leu Gln Lys Leu Ala Val Pro Ile Ile Asp Thr Pro Lys Cys Asn 180 185 190 . . Leu Leu Tyr Ser Lys Asp Thr Glu Phe Gly Tyr Gln Pro Lys Thr Ile 200 195 205 . Lys Asn Asp Met Leu Cys Ala Gly Phe Glu Glu Gly Lys Lys Asp Ala 210 215 . 220 Cys Lys Gly Asp Ser Gly Gly Pro Leu Val Cys Leu Val Gly Gln Ser 230 235 225 240 Trp Leu Gln Ala Gly Val Ile Ser Trp Gly Glu Gly Cys Ala Arg Gln 250 245 255 ~ Asn Arg Pro Gly Val Tyr Ile Arg Val Thr Ala His His Asn Trp Ile · · · 260 - 265 270 His Arg Ile Ile Pro Lys Leu Gln Phe Gln Pro Ala Arg Leu Gly Gly 275 280 285 Gln Lys 290 <210> 1295 <211> 144 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (77) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (141) <223> Xaa equals any of the naturally occurring L-amino acids . <400> 1295 Met Leu Leu Gly Val Gly Leu Val Val Leu Ala Leu Ile Ala Gly Trp

1				5					10					15	
Val	Leu	Gln	Gln 20	Ala	Asn	Arg	Ser	Ala 25	Gln	Gln	Leu	Thr	Ala 30	Thr	Gly
Gln	Ser	Leu 35	Met	Gln	Ser	Glń	Arg 40	Leu	Ala	Lys	Ser	Val 45	Ser	Gln	Ala
Lėu	Val 50	Gly	Ser	Pro	Gln	Ala 55	Phe	Pro	Asp	Val	Val 60	Glu	Ser	Ser	Gly
Val 65	Leu	Ala	Arg	Asn	Val 70	Arg	Ala	Leu	Asn	Gly 75	Gly	Xaa	Asn	Glu	Leu 80
Asp	Val	Gln	Ala	Leu 85	Gly	Glu	Pro	Phe	Arg 90	Pro	Glu	Leu	Asp	AÌa 95	Ile
Thr	Pro	Leu	Val 100	Glu	Arg	Ala	Glu	Arg 105	Asn	Ala	Gly	Val	Val 110	Met	Gly ·_
Gln	Gln	Lys 115	Ile	Leu	Thr	Gln	Val 120	Gly	Xaa	Ala	Leu	Arg 125	Thr	Ile <sup>.</sup>	Lys
Pro	Pro 130	Val	Leu	Gly	Pro	Cys 135	Trp	Arg	Ser	Arg	Arg 140	Xaa	Ser	Ser	Ser ·

<210> 1296 <211> 187 <212> PRT <213> Homo sapiens <220> <221> SITE ... <222> (16) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE · . <222> (72) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1296 Thr Ser Arg Val Trp Cys Pro His Val Arg Arg Ash Arg Pro Ser Xaa 1 5 10 15 Gln Thr Ala Glu Pro Cys Ala Val Asn Trp Lys Ala Cys Lys Ala Thr 20 25 30 . . Val Gly Thr Ile Gly His Gly Cys Gly Pro Ala Ile Ala Leu Ala Val ·35 Ala Gly Ile Phe Val Leu Leu Cys Gly Val Gly Ile Ser Arg Val Gln 60 Leu Leu Asp Ser Arg Ser Arg Xaa Ala Thr Ala Glu Ala Gln Gln Arg

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. 70 75 65 80 Asp Ala Lys Arg Gln Glu Gln Glu Ala Lys Arg Ile Asn Asp Ala Asn 90 85 · 95 Gln Ala Ala Ile Leu Arg Leu Met Asn Glu Leu Gln Ser Val Ala Glu 100 105 110 Gly Asp Leu Thr Gln Glu Ala Thr Val Thr Glu Asp Ile Thr Gly Ala 120 115 125 . Ile Ala Asp Ser Val Asn Tyr Thr Val Glu Glu Ser Ala Ser Trp Trp . 130 135 140 Ala Thr Cys Arg Thr Pro Arg Pro Gly Trp Pro Arg Pro Pro Arg Arg · 150 155 145 -160 Trp Thr Ala Pro Leu Arg Asn Cys Trp Arg Leu Arg Pro Ser Ser Cys 165 170 175 Val Lys Ser Val Lys Arg Ala Val Arg Cys Ser 180 185 • • . <210> 1297 . <211> 346 <212> PRT <213> Homo sapiens <400> 1297 Met Leu Leu Gly Val Gly Leu Val Val Leu Ala Leu Ile Ala Gly Trp . 5 10 : 15 Val Leu Gln Gln Ala Asn Arg Ser Ala Gln Gln Leu Thr Ala Thr Gly . 20 25 30 Gln Ser Leu Met Gln Ser Gln Arg Leu Ala Lys Ser Val Ser Gln Ala 40 35 45 Leu Val Gly Ser Pro Gln Ala Phe Pro Asp Val Val Glu Ser Ser Gly. 55 50 , 60 Val Leu Ala Arg Asn Val Arg Ala Leu Asn Gly Gly Asp Asn Glu Leu 65 70 80 . Asp Val Gln Ala Leu Gly Glu Pro Phe Arg Pro Glu Leu Asp Ala Ile 85 90 95 -Thr Pro Leu Val Glu Arg Ala Glu Arg Asn Ala Gly Val Val Met Gly 100 105 110 Gln Gln Lys Ile Leu Thr Gln Val Gly Asp Ala Leu Arg Thr Ile Asn 115 120 \_ 125 Arg Gln Ser Ser Asp Leu Leu Glu Ile Ala Glu Thr Val Ser Ser Leu 130 135 140 Lys Leu Gln Gln Asn Ala Pro Ala Ser Glu Ile Ser Ala Ala Gly Gln 155 \_ 160 145 150

Leu Val Met Leu Thr Gln Arg Ile Gly Lys Ser Ala Asn Glu Phe Gln . 165 170 175 Thr Thr Glu Gly Val Ser Pro Glu Ala Val Phe Leu Leu Gly Lys Asp 180 185 190 Leu Asn Ser Phe Lys Glu Ile Ala Arg Gly Met Leu Asp Gly Ser Ala 195 200 205 Asp Leu Arg Leu Ala Ala Thr Arg Asp Ala Gln Thr Arg Glu Gln Leu 210 215 220 Glu Ser Leu Ile Lys Leu Tyr Glu Gln Thr Arg Thr Gln Ala Gly Ala 225 230 235 240 Ile Leu Gly Asn Leu Gln Gly Leu Val Ser Ala Arg Glu Ala Gln Ser 245 250 255 Ala Ile Leu Ala Asp Ser Glu Pro Leu Arg Arg Gln Leu Glu Gly Leu 260 265 . 270 Gln Ser Lys Leu Ser Ala Gln Ser Gly Met Gly Ala Ala Ser Ser Leu 275 280 285 Arg Ser Pro Ser Pro Val Ser Ser Ser Cys Cys Ala Ala Trp Val Phe 290 295 . 300 Arg Ala Cys Ser Cys Trp Thr Ala Ala Ala Ala Lys Pro Arg Pro Lys 305 310 -315 320 His Ser Ser Val Met Pro Ser Ala Arg Asn Arg Lys Pro Ser Ala Ser 325 330 335 Thr Thr Pro Thr Arg Arg Pro Phe Cys Asp - 340 345 <210> 1298 <211> 29 <212> PRT

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1 5 10 15

Val Leu Pro Leu Ser Ser Gln Ser Met Pro Phe Leu Gln 20 · 25

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Ile Trp Phe Ala Tyr Ser Arg Gly His Phe Asp Arg Thr Lys Lys Gly 260 265 270 Thr Ser Ser Lys Lys Val Ile Tyr Ser Gln Pro Ser Ala Arg Ser Glu 275 280 285 Gly Glu Phe Lys Gln Thr Ser Ser Phe Leu Val 290 295 <210> 1301 <211> 299 <212> PRT <213> Homo sapiens <400> 1301 Met Gly Thr Lys Ala Gln Val Glu Arg Lys Leu Leu Cys Leu Phe Ile 1 , 5 10 Leu Ala Ile Leu Leu Cys Ser Leu Ala Leu Gly Ser Val Thr Val His . 30 20 . 25 Ser Ser Glu Pro Glu Val Arg Ile Pro Glu Asn Asn Pro Val Lys Leu . 35 40 · 45 Ser Cys Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val Glu Trp Lys Phe 50 55 60 ... Asp Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr Asn Asn Lys Ile Thr 65 70 · 75 80 Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu Pro Thr Gly Ile Thr Phe 85 · 90 95 Lys Ser Val Thr Arg Glu Asp Thr Gly Thr Tyr Thr Cys Met Val Ser 100 105 110 . Glu Glu Gly Gly Asn Ser Tyr Gly Glu Val Lys Val Lys Leu Ile Val • 115 ' 120 125 . . Leu Val Pro Pro Ser Lys Pro Thr Val Asn Ile Pro Ser Ser Ala Thr 130 135 140 Ile Gly Asn Àrg Ala Val Leu Thr Cys Ser Glu Gln Asp Gly Ser Pro 145 . 155 150 160 Pro Ser Glu Tyr Thr Trp Phe Lys Asp Gly Ile Val Met Pro Thr Asn 165 170 <sup>·</sup> 175 Pro Lys Ser Thr Arg Ala Phe Ser Asn Ser Ser Tyr Val Leu Asn Pro 180 185 190 Thr Thr Gly Glu Leu Val Phe Asp Pro Leu Ser Ala Ser Asp Thr Gly 195 200 2057 Glu Tyr Ser Cys Glu Ala Arg Asn Gly Tyr Gly Thr Pro Met Thr Ser 210 215 220

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Asn Ala Val Arg Met Glu Ala Val Glu Arg Asn Val Gly Val Ile Val 225 230 235 240 . Ala Ala Val Leu Val Thr Leu Ile Leu Leu Gly Ile Leu Val Phe Gly 245 250 255 Ile Trp Phe Ala Tyr Ser Arg Gly His Phe Asp Arg Thr Lys Lys Gly 265 260 270 Thr Ser Ser Lys Lys Val Ile Tyr Ser Gln Pro Ser Ala Arg Ser Glu 275 280 285 Gly Glu Phe Lys Gln Thr Ser Ser Phe Leu Val 290 295 <210> 1302 <211> 136 <212> PRT <213> Homo sapiens ••• <400> 1302 Ala Arg Ala Lys Pro Glu Arg Pro Ala Gly Trp Ala Glu Ser Val Leu 5 . 10 1 15 Glu Glu Asp Ala Ser Glu Leu Glu Pro Ala Phe Ser Arg Thr Val Gly 20 25 30 Thr Ile Gln His Cys Leu His Leu Thr Ser Val Tyr Thr His Phe Leu 35 40 · 45 Pro Gln Arg Gly Arg Pro Glu Val Thr Thr Met Pro Leu Gly Leu Gly 50 .55 60 . Met Thr Val Asp Tyr Ile Phe Phe Ser Ala Glu Ser Cys Glu Asn Gly 65 75 80 Asn Arg Thr Asp His Arg Leu Tyr Arg Asp Gly Thr Leu Lys Leu Leu 85 90 95 Gly Arg Leu Ser Leu Leu Ser Glu Glu Ile Leu Trp Ala Ala Asn Gly 100 Leu Pro Asn Pro Phe Cys Ser Ser Asp His Leu Cys Leu Leu Ala Ser 115 120 125 Phe Gly Met Glu Val Thr Ala Pro 130 135 <210> 1303 <211> 100

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<222> (22)

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Leu	Ile	Asp	Lys	Gly 85	Leu	Ala	Gln	Ser	Ser 90	Leu	Ala	Leu	Leu	Met 95	Asp
Asn	Pro	Gly	Glu 100	Glu	Asn	Ala	Ala	Ser 105	Glu	Asp	Arg	Trp	Ser 110	Ser	Arg
Gln	Leu	Ser 115	Asp	Leu	Arg	Ala	Ala 120	Glu	Asn	Leu	Asp	Glu 125		Phe	Pro
Glu	Met 130	Leu	Gly	Glu	Glu	Pro 135	Leu	Leu	Glu	Val	Glu 140	Gly	Val	Glu	Gly
Ser 145	Met	Trp	Ala	Ala	Ile 150		Met	Gln	Ser	Glu 155	Pro	Gln	Tyr	Ala	Asp 160
Cys	Ala	Ala	Leu	Pro 165	Val	Gly	Ala	Leu	Ala 170	Thr	Glu	Gln	Trp	Glu 175	Glu
Asp	Pro	Ala	Val 180	Leu	Ala	Trp	Ser	Ile 185	Ala	Pro	Glu	Pro	Val 190		Gln
Glu	Glu	Ala 195	Ser	Ile	Trp	Pro	Phe 200	Glu	Gly	Leu	Gly	Gln 205	Leu	Gln	Pro
Pro	Ala 210	Val	Glu	Ile	Pro	Tyr 215	His	Glu	Ile	Leu	Trp 220	Arg	Glu	Trp	Glu
Asp 225	Phe	Ser	Thr	Gln	Pro 230	Asp	Ala	Gln	Gly	Leu 235	Lys	Ala	Gly	Asp	Gly 240
Pro	Gln	Phe	Gln	Phe 245	Thr	Leu	Met	Ser	Tyr 250	Asn	Ile	Leu	Ala	Gln 255	Asp
Leu	Met	Gln	Gln 260	Ser	Ser	Glu	Leu	Tyr 265	Leu	His	Cys	His	Pro 270	Asp	Ile
Leu 、	Asn	Trp 275	Asn	Tyr	Arg	Phe	Val 280	Asn	Leu	Met	Gln	Glu 285	Phe	Gln	His
Trp	Asp 290	Pro	Asp	Ile	Leu	Cys 295	Leu	Gln	Glu	Val	Gln 300	Glu	Asp	His	Tyr
Trp 305	Glu	Gln	Leu		Pro 310		Leu	Arg	Met	Met 315	Gly	Phe	Thr	Cys	Phe 320
Tyr	Lys	Arg	Arg	Thr 325	Gly	Cys	Lys	Thr	Asp 330	Gly	Cys	Ala	Val	Cýs 335	Tyr
Lys	Pro	Thr	Arg 340	Phe	Arg	Leu	Leu	Cys 345	Ala	Ser	Ρ́ro	Val	Glu 350	Tyr	Phe
Arg	Pro	Gly 355	Leu	Glu	Leu	Leu	Asn 360	Arg	Asp	Asn	Val	Gly 365	Leu	Val	Leu
Leu	Leu 370	Gln	Pro	Leu	Val	Pro 375	Glu	Gly	Leu	Gly	Gln 380	Val	Ser	Val	Ala
Pro	Leu	Cys	Val	Ala	Asn	Thr	His	Ile	Leu	Tyr	Asn	Pro	Arg	Arg	Gly

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385					390					395					400
Asp V	al	Lys	Leu	Ala 405		Met	Ala	Ile	Leu 410	Leu	Ala	Glu	Val	Asp 415	Lys
Val A	la	Arg	Leu 420	Ser	Asp	Gly	Ser	His 425	Cys	Pro	Ile	Ile	Leu 430	Суз	Gly
Asp L	eu	Asn 435	Ser	Val	Pro	Asp	Ser 440	Pro	Leu	Tyr	Asn	Phe 445	Ile	Arg	Asp
Gly G 4	;lu 50	Leu	Gln	Tyr	His	Gly 455	Met	Pro	Ala	Trp	Lys 460	Val	Ser	Gly	Gln
Glu A 465	sp	Phe	Ser	His	Gln 470	Leu	Tyr	Gln	Arg	Lys 475	Leu	Gln	Ala	Pro	480
Trp P	ro	Ser	Ser	Leu 485	Gly	Ile	Thr	Asp	Cys 490	Cys	Gln	Tyr	Val	Thr 495	Ser
Cys H	is	Pro	Lys 500	Arg	Ser	Glu	Arg	Arg 505	Lys	Tyr	Gly	Arg	Asp 510	Phe	Leu
Leu À	rg	Phe 515	Arg	Phe	Cys	Ser	Ile 520	Ala	Суз	Gln	Arg	Pro 525	Val	Gly	Leu .
Val <sup>.</sup> L 5	eu 30	Met	Glu	Gly	Val	Thr 535	Asp	Thr	Lys	Pro	Glu 540	Arg	Pro	Ala	Gly
Trp A 545	la	Glu	Ser	Val	Leu 550	Glu	Glu	Asp	Ala	Ser 555	Glu	Leu	Glu		Ala 560
Phe S	er	Arg	Thr	Val 565	Gly	Thr	Ile	Gln	His 570	Суş	Leu	His	Leu	Thr 575	Ser
Val T	yr	Thr	His 580	Phe	Leu	Pro	Gln	Arg 585	Gly	Arg	Pro	Glu	Val 590	Thr	Thr,
MetP	ro	Leu 595	Gly	Leu	Gly	Met	Thr 600	Val	Asp	Tyr	Ile	Phe 605	Phe	Ser	Ala .
Glu S 6	er 10	Суз	Glu		Gly			Thr	Asp		Arg 620		Tyr	Arg	Asp
Gly T 625	'hr	Leu ,	Lys	Leu	Leu 630	Gly	Arg	Leu	Ser	Leu 635	Leu	Ser	Glu	Glu	Ile 640
Leu T	'rp	Ala	Ala	Asn 645	Gly	Leu	Pro	Asn	.Pro 650	Phe	Суз	Ser	Ser	Asp 655	His
Leu C	'ys	Leu	Leu 660	Ala,	Ser	Phe	Gly	Met 665	Glu	Val	Thr	Ala	Pro 670		

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180 185 190 Tyr Phe Phe Lys Cys Met Thr Xaa Lys Ser Gly Ile Gly Xaa Phe Glu ' 200 195 205 Leu Gly Asp Asp His Phe Val Lys Leu Asn Val Gly Xaa Leu Ala Phe 210 215 220 Leu Phe Lys Phe 225 <210> 1306 <211> 170 <212> PRT <213> Homo sapiens <400> 1306 Met Ala Ala Ala Gly Ser Val Lys Ala Ala Leu Gln Val Ala Glu Val 5 . 1 10 · 15 Leu Glu Ala Ile Val Ser Cys Cys Val Gly Pro Glu Gly Arg Gln Val 20 25 30 Leu Cys Thr Lys Pro Thr Gly Glu Val Leu Leu Ser Arg Asn Gly Gly 35 40 45 ٠. Arg Leu Leu Glu Ala Leu His Leu Glu His Pro Ile Ala Arg Met Ile 50 55 60 Val Asp Cys Val Ser Ser His Leu Lys Lys Thr Gly Asp Gly Ala Lys 70 65 . 75 80 Thr Phe Ile Ile Phe Leu Cys His Leu Leu Arg Gly Leu His Ala Ile 85 90 . 95 : Thr Asp Arg Glu Lys Asp Pro Leu Met Cys Glu Asn Ile Gln Thr His 105 ( 110 100 Gly Arg His Trp Lys Asn Cys Ser Arg Trp Lys Phe Ile Ser Gln Ala 115 120 125 Leu Leu Thr Phe Gln Thr Gln Ile Leu Asp Gly Ile Met Asp Gln Tyr .140 130 135 Leu Ser Arg His Phe Leu Ser Ile Phe Ser Ser Ala Lys Glu Arg Thr 145 150 155 160 Leu Cys Arg Ser Ser Leu Glu Ser Val Ser 165 170

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35		40		-	45	
Asp Cys Tyr G 50	Slu Val Leu	Gly Val .55	Ser Arg	Ser Ala 60	Gly Lys	; Ala Glu
Ile Ala Arg A 65	la Tyr Arg 70	Gln Leu	Ala Arg	Arg Tyr 75	His Pro	Asp Arg 80
Tyr Arg Pro G	Sln Pro Gly 85	Asp Glu	Gly Pro 90	Gly Arg	Thr Pro	95 Gln Ser
Ala Glu Glu A 1	Ala Phe Leu 100	Leu Val	Ala Thr 105	Ala Tyr	Glu Thr 110	-
Asp Glu Glu T 115	Thr Arg Lys	Asp Tyr 120	Asp Tyr	Met Leu	Asp His 125	; Pro Glu
Glu Tyr Tyr S 130	Ser His Tyr	Tyr His 135	Tyr Tyr	Ser Arg 140	Arg Lei	ı Ala Pro
Lys Val Asp V 145	Val Arg Val 150	Val Ile	Leu Val	Ser Val 155	Cys Ala	Ile Ser 160
Val Phe Gln F	he Phe Ser 165	Trp Trp	Asn Ser 170	Tyr Asn	Lys Ala	a Ile Ser 175
Tyr Leu Ala T 1	Thr Val Pro 180	Lys Tyr	Arg Ile 185	Gln Ala	Thr Glu 190	
Lys Gln Gln G 195	Sly Leu Leu	Lys Lys 200	Ala Lys	Glu Lys	Gly Lys 205	; Asn Lys
Lys Ser Lys G 210	Slu Glu Ile	Arg Asp 215	Glu Glu	Glu Asn 220	Ile Ile	: Lys Asn
Ile Ile Lys S 225	Ser Lys Ile 230	Asp Ile	Lys Gly	Gly Tyr 235	Gln Lys	s Pro Gln . 240
Ile Cys Asp I	Leu Leu 245	Phe Gln	Ile Ile 250	Leu .Ala	Pro Phe	e His Leu 255
Cys Ser Tyr I 2	Ile Val Trp 260	Tyr Cys	Arg Trp 265	Ile Tyr	Asn Phe 27(	
Lys Gly Lys G 275	Glu Tyr Gly	Glu Glu 280	Glu Arg	Leu Tyr	Ile Ile 285	e Arg Lys
Ser Met Lys M 290	Met Ser Lys	Ser Gln 295	Phe Asp	Ser Leu 300	Glu Ası	) His Gln
Lys Glu Thr E 305	310	_	-	315		320
Val Tyr Lys G	Gln Glu Gln 325	Glu Glu	Glu Leu 330	Lys Lys	Lys Leu	ı Ala Asn 335
Asp Pro Arg 7 3	Irp Lys Arg 340	Tyr Arg	Arg Trp 345	Met Lys	Asn Glu 350	
Gly Arg Ley 1	Thr Dha Val	Acn Acn				

Gly Arg Leu Thr Phe Val Asp Asp

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· 55 50 60 Asp Leu Thr Thr Gly Pro Thr Ser Ser Pro Ala Pro Leu Gly Ile Leu 65 70 75 80 His Thr Ala Val Arg Val Thr His Leu His Thr Leu Thr Leu Met Gly 85 90 95 Glu Glu Lys Ala Val Phe Val Ala Arg Ala Gln Val Gly Thr Leu Ala 100 105 . 110 . <210> 1311 <211> 108 <212> PRT <213> Homo sapiens <400> 1311 Met Phe Val Ser Val Thr Ala Phe Phe Phe Ser Leu Leu Phe Leu Gly 1 · 5 10 15 Met Phe Leu Ser Gly Met Val Ala Gln Ile Asp Ala Asn Trp Asn Phe 20 25 30 Leu Asp Phe Ala Tyr His Phe Thr Val Phe Val Phe Tyr Phe Gly Ala 35 . . 40 45 Phe Leu Leu Glu Ala Ala Ala Thr Ser Leu His Asp Leu His Cys Asn . 60 50 55 Thr Thr Ile Thr Gly Gln Pro Leu Leu Ser Asp Asn Gln Tyr Asn Ile 65 70 75 80 Asn Val Ala Ala Ser Ile Phe Ala Phe Met Thr Thr Ala Cys Tyr Gly 90 85 95 Cys Ser Leu Gly Leu Ala Leu Arg Arg Trp Arg Pro 100 . 105 . • <210> 1312 · <211> 77 <212> PRT <213> Homo sapiens . <400> 1312 Asn His Ile Gln His Lys Asn Tyr Phe Trp Leu Asn Ser Thr Glu Lys 5 1 10 15 Tyr Phe Asn Leu Pro Val Glu Ile Leu Val Met Glu Arg Cys Gln Thr 20 · 25 · 30 Val Leu Asn Gly Arg Thr Ser Lys Ser Glu Ala Thr Val Pro Thr Thr . 35 40 45 · . .

Arg Gly Leu Leu Tyr Cys Ser Thr Phe Ser Ala Leu Tyr Phe Leu Ala 50 55 60 Glu Ala Ser Pro Trp Ser Ala Met Tyr Lys Leu Gly Tyr 65 70 75 <210> 1313 <211> 108 <212> PRT <213> Homo sapiens <400> 1313 Met Phe Val Ser Val Thr Ala Phe Phe Phe Ser Leu Leu Phe Leu Gly . 5 1 10 15 Met Phe Leu Ser Gly Met Val Ala Gln Ile Asp Ala Asn Trp Asn Phe 20 25 30 Leu Asp Phe Ala Tyr His Phe Thr Val Phe Val Phe Tyr Phe Gly Ala 35 . 40 45 Phe Leu Leu Glu Ala Ala Ala Thr Ser Leu His Asp Leu His Cys Asn 50 55. 60 . Thr Thr Ile Thr Gly Gln Pro Leu Leu Ser Asp Asn Gln Tyr Asn Ile 75 70 65 80 Asn Val Ala Ala Ser IIe Phe Ala Phe Met Thr Thr Ala Trp Tyr Gly · 85 90 95 . Cys Ser Leu Gly Leu Ala Leu Arg Arg Trp Arg Pro 100 105 <210> 1314 <211> 176 <212> PRT <213> Homo sapiens <400> 1314 Met Ser Ala Gly Gly Ala Ser Val Pro Pro Pro Pro Asn Pro Ala Val •1 -5 10 15 Ser Phe Pro Pro Pro Arg Val Thr Leu Pro Ala Gly Pro Asp Ile Leu 20 25 30 Arg Thr Tyr Ser Gly Ala Phe Val Cys Leu Glu Ile Leu Phe Gly Gly 35 40 45 Leu Val Trp Ile Leu Val Ala Ser Ser Asn Val Pro Leu Pro Leu Leu . 50 55 .- 60 Gln Gly Trp Val Met Phe Val Ser Val Thr Ala Phe Phe Ser Leu 65 70 75 80 Leu Phe Leu Gly Met Phe Leu Ser Gly Met Val Ala Gln Ile Asp Ala 85 90 95

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Asn Trp Asn Phe Leu Asp Phe Ala Tyr His Phe Thr Val Phe Val Phe 100 105 110 Tyr Phe Gly Ala Phe Leu Leu Glu Ala Ala Ala Thr Ser Leu His Asp 115 120 125 Leu His Cys Asn Thr Thr Ile Thr Gly Gln Pro Leu Leu Ser Asp Asn · 130 135. 140 Gln Tyr Asn Ile Asn Val Ala Ala Ser Ile Phe Ala Phe Met Thr Thr 145 150 155 160 Ala Cys Tyr Gly Cys Ser Leu Gly Leu Ala Leu Arg Arg Trp Arg Pro 165 170 175 <210> 1315 <211> 103 <212> PRT <213> Homo sapiens <400> 1315 Met Pro Leu Cys Ser Leu Leu Thr Cys Leu Gly Leu Asn Val Leu Phe 1 5 10 15 Leu Thr Leu Asn Glu Gly Ala Trp Tyr Ser Val Gly Ala Leu Met Ile 20 . 25 30 Ser Val Pro Ala Leu Leu Gly Tyr Leu Gln Glu Val Cys Arg Ala Arg 35 . 40 . 45 Leu Pro Asp Ser Glu Leu Met Arg Arg Lys Tyr His Ser Val Arg Gln 50 .55 60 Glu Asp Leu Gln Arg Val Arg Leu Ser Arg Pro Glu Ala Val Ala Glu 65 · 70 75 80 Val Lys Ser Phe Leu Ile Gln Leu Glu Ala Phe Leu Lys Pro Pro Val 85 90 · 95 Leu His Met Leu Lys Pro Pro . 100 . . . <210> 1316 <211> 237 <212> PRT <213> Homo sapiens <400> 1316 Met Pro Leu Cys Ser Leu Leu Thr Cys Leu Gly Leu Asn Val Leu Phe 5 15. 1 . 10 Leu Thr Leu Asn Glu Gly Ala Trp Tyr Ser Val Gly Ala Leu Met Ile 773 .

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				20		•			25 <u></u>			•		30			-		•
	Ser	Val	Pro 35	Ala	Leu	Leu	Gly	Tyr 40	Leu	Gln	Glu	Val	Cys 45	Årg	Ala	Arg			
	Leu	Pro 50	Asp	Ser 	Glu	Leu	Met 55	Arg	Arg	Lys	Tyr	His 60	Ser	Val	Arg	Gln			
	Glu 65	Asp	Leu	Gln	Arg	Val 70	Arg	Leu	Ser	Arg	Pro 75	Glu	Ala	Val	Ala	Glu 80			
	Val	Lys	Ser	Phe	Leu 85	Ile	Gln	Leu	Glu	Ala 90	Phe	Leu	Ser	Arg	Leu 95	Cys	•		
	•			Glu 100					105					110					
			115	Gln				120		•			125				• .		
	•	130		Pro			135		•			140							
	145		•	Asn		150					155			-		160	•		
				Gln	165			<b></b>		170					175				
				Pro 180					185					190				÷	
			195	Leu				200	•				205						
		210					215	-				220	•	Ala	Ile	Asp		-	
	Glu 225	Asp	Asp	Glu	Gly	Ala 230	Pro	Cys	Pro	Ala	Leu 235	Phe	Leu ·						
	<213 <213	0> 1 1> 1 2> P 3> H	65 RT	sapi	ens		·、		•		·	•					•		
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55 50 60. His Pro Arg Thr Pro Leu Ser Phe Ile Pro Pro Asn Gln Leu Gln Val 70 65 · 75 80 Thr Arg Leu Tyr Ser Glu Ser Lys Phe Val Ile Lys Glu Gln Arg Leu 85 90 95 Ala Thr Thr Arg Thr Cys Arg Arg Thr Val Gly Thr Arg Lys Thr His 100 105 110 Ser Lys Lys Pro Arg Pro Gly Thr Val Val Lys Pro Val Ile Pro Thr 115 . 120 125 Leu Trp Glu Thr Glu Val Gly Val Ser Ile Glu Pro Arg Arg Ser Arg 130 135 140 Ser Ala Trp Glu Thr Gln Gly Gly Pro His Arg Tyr Lys Ile Phe 145 150 155 <210> 1319 <211> 380 <212> PRT <213> Homo sapiens <400> 1319 Met Ala Arg Leu Gly Ala Val Arg Ser His Tyr Cys Ala Leu Leu Leu 1. 5 10 15 Ala Ala Leu Ala Val Cys Ala Phe Tyr Tyr Leu Gly Ser Gly Arg · 20 - 25 30 Glu Thr Phe Ser Ser Ala Thr Lys Arg Leu Lys Glu Ala Arg Ala Gly 35 40 45 Ala Pro Ala Ala Pro Ser Pro Pro Ala Leu Glu Leu Ala Arg Gly Ser . 50 55 60 Val Ala Pro Ala Pro Gly Ala Lys Ala Lys Ser Leu Glu Gly Gly Gly 70 65 ۰. 75 80 Ala Gly Pro Val Asp Tyr His Leu Leu Met Met Phe Thr Lys Ala Glu 85 90 95 His Asn Ala Ala Leu Gln Ala Lys Ala Arg Val Ala Leu Arg Ser Leu 100 . 105 110 Leu Arg Leu Ala Lys Phe Glu Ala His Glu Val Leu Asn Leu His Phe 115 120 125 Val Ser Glu Glu Ala Ser Arg Glu Val Ala Lys Gly Leu Leu Arg Glu 135 130 140 Leu Leu Pro Pro Ala Ala Gly Phe Lys Cys Lys Val Ile Phe His Asp 145 1.50 155 160 Val Ala Val Leu Thr Asp Lys Leu Phe Pro Ile Val Glu Ala Met Gln <sup>.</sup> 165 170 175

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Lys His Phe Ser Ala Gly Leu Gly Thr Tyr Tyr Ser Asp Ser Ile Phe Phe Leu Ser Val Ala Met His Gln Ile Met Pro Lys Glu Ile Leu Gln Ile Ile Gln Leu Asp Leu Asp Leu Lys Phe Lys Thr Asn Ile Arg Glu Leu Phe Glu Glu Phe Asp Ser Phe Leu Pro Gly Ala Ile Ile Gly Ile Ala Arg Glu Met Gln Pro Val Tyr Arg His Thr Phe Trp Gln Phe Arg , His Glu Asn Pro Gln Thr Arg Val Gly Gly Pro Pro Pro Glu Gly Leu Pro Gly Phe Asn Ser Gly Val Met Leu Leu Asn Leu Glu Ala Met Arg Gln Ser Pro Leu Tyr Ser Arg Leu Leu Glu Pro Ala Gln Val Gln Gln Leu Ala Asp Lys Tyr His Phe Arg Gly His Leu Gly Asp Gln Asp Phe Phe Thr Met Ile Gly Met Glu His Pro Lys Leu Phe His Val Leu Asp Cys Thr Trp Asn Arg Gln Leu Cys Thr Trp Trp Arg Asp His Gly Tyr 340 345 Ser Asp Val Phe Glu Ala Tyr Phe Arg Cys Glu Gly His Val Lys Ile Tyr His Gly Asn Cys Asn Thr Pro Ile Pro Glu Asp <210> 1320 <211> 73 <212> PRT <213> Homo sapiens <400> 1320 Leu Glu Ser Tyr Ser Ser Val Arg Glu Leu Leu Val Ser Val Arg Phe Tyr Val Val Cys Lys Val Arg Gly Ser Val Leu Phe Pro Tyr Leu Gly Lys Ser Thr Ala Gly Val Glu Gly Leu Tyr Val Pro Phe Asn Val Thr Val Leu Lys Asp Leu Ser Arg Glu Ser Glu Ser Phe Ala Glu Cys Asp 

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Thr Glu Glu Ile Thr Ser Leu Trp Gln Gly Ser Leu Phe Asn Ala Asn 135 140 130 Tyr Asp Val Gln Arg Phe Ile Val Gly Ser Asp Arg Ala Ile Phe Met 155 150 160 145 Leu Arg Asp Gly Ser Tyr Ala Trp Glu Ile Lys Asp Phe Leu Val Gly 165 170 . 175 Gln Asp Arg Cys Ala Asp Val Thr Leu Glu Gly Gln Val Tyr Pro Gly 180 185 190 Lys Gly Gly Gly Ser Lys Glu Lys Asn Lys Thr Lys Gln Asp Lys Gly . 205 195 200 Lys Lys Lys Clu Gly Asp Leu Lys Ser Arg Ser Ser Lys Glu Glu 210 · 215 220 • Asn Arg Ala Gly Asn Lys Arg Glu Asp Leu 225 230 <210> 1323 <211> 15 <212> PRT .<213> Homo sapiens <400> 1323 Asn Ala Thr Lys Ser Gln Pro Cys Leu Ser Ser Leu Leu Leu Phe 1 5 10 15 <210> 1324 <211> 62 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1324 . Lys Tyr Xaa Lys His Pro Ser Lys Ser Phe Glu Leu Thr Leu Val Leu 10 1 5 15 1 Arg Lys Leu Ser Leu His Asn Gln Pro Pro Gly Lys Thr Glu Cys His 20 25 30 Leu Leu Lys Ser Lys Cys Cys Val Ile Ile Thr Leu Gln Thr Lys Trp 35 40 45 Arg Tyr Tyr Leu Phe Cys Lys Gln Gln Thr Lys Gln Asn Ser 50 55 60

779

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Arg Gly Thr Ala Leu Gln Leu Ser Tyr Pro Phe Ser Met Ala Gly Arg 55 50 Thr Ala Glu Arg Pro Cys Ser Met Thr Asn His Ser Phe His Leu Leu 70 75 80 Ser Ile Tyr Trp Glu Leu Gly Thr Val Leu Ser Xaa Lys Arg Val Leu 85 . 90 95 Thr His Leu Leu Gln Gln Pro Gly Lys Ala Gly Ser Ser Val Ser Pro 100 105 110 Cys Ser Lys Leu Gly Asp Leu Glu His Arg Arg Ser Ser Ala Trp Leu 120 115 125 · Lys Ala His Ser Ser Xaa Val Gln Ile Leu Cys Pro Ser Trp His Pro 135 130 140 Ser Leu Gly Gly Ser Gly Val Gly Ser Leu Gln Ser Val Pro Gly Gly 150 145 155 160 Trp Met Thr Lys Leu Gln Pro Ser Arg Xaa Pro Thr Ile Ser Ile Ala 165 170 175 Gln Trp Ser Gln Lys Glu Thr Asp His Phe Thr Asp Gln Arg Asn Lys . 180 185 190 Gly Ala Xaa Leu Leu Asn Pro Gly Ala Ser Asp Arg Xaa Lys Pro Glu 195 200 205 Xaa Arg Thr Lys Lys Xaa Pro Val Asn Ser Glu Pro Gly Glu Thr Leu 210 215 220 Pro Phe Thr Asn 225 <210> 1327 <211> 84 <212> PRT

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Leu Leu Gly Ser

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Arg Gly Thr Ala Leu Gln Leu Ser Tyr Pro Phe Ser Met Ala Gly Arg 55 50 60 Thr Ala Glu Arg Pro Cys Ser Met Thr Asn His Ser Phe His Leu Leu 70 65 75 80 Ser Ile Tyr Trp Glu Leu Gly Thr Val Leu Ser Val Lys Arg Val Leu 85 • 90 95 Thr His Leu Leu Gln Gln Pro Gly Lys Ala Val Leu Pro Leu Ala Pro 100 105 110 Ala Gln Ser 115 <210> 1330 .<211> 59 <212> PRT <213> Homo sapiens . <220> <221> SITE <222> (54) <223> Xaa equals any of the naturally occurring L-amino acids . <220> • . <221> SITE . <222> (56) <223> Xaa equals any of the naturally occurring L-amino acids . <400> 1330 Met Glu Asn Gln Met Leu Thr Cys Val Ala Ile Phe Val Leu Phe Cys 1 5 10 15 Phe Val Leu Phe Leu Arg Gln Gly Leu Ala Leu Ser Pro Arg Leu Glu · 20 25 30 Cys Ser Gly Met Ile Arg Ala Tyr Cys Ser Leu Thr Leu Asp Phe Leu • 40 35 45 . . Gly Ser Ser Asn Pro Xaa Thr Xaa Ala Pro Lys . 55 50 <210> 1331 <211> 59 <212> PRT . <213> Homo sapiens <400> 1331 Met Glu Asn Gln Met Leu Thr Cys Val Ala Ile Phe Val Leu Phe Cys 5 · · 10 1 15 . . Phe Val Leu Phe Leu Arg Gln Gly Leu Ala Leu Ser Pro Arg Leu Glu 20 30 . 25 783

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Cys Ser Gly Met Ile Arg Ala Tyr Cys Ser Leu Thr Leu Asp Phe Leu 35 40 45 Gly Ser Ser Asn Pro Pro Thr Ser Ala Pro Lys 50 55

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Arg Thr Val

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Ile Ala	Ala	Ala 20	Leu	Ser	Val	Gln	Ser 25	Pro	Phe	Thr	Arg	Ser 30	Ala	Gln
Ser Ser	Pro 35	Glu	Cys	Ala	Ala	Ala 40	Arg	Arg	Pro	Leu	Glu 45	Ser	Asp	Gln
Gly Asp 50	Pro	Phe	Thr	Leu	Phe 55	Asn	Val	Phe	Asn	Ala 60	Trp	Val	Gln	Val
Lys Ser 65	Glu	Arg	Ser	Arg 70	Asn	Ser	Arg	·Lys	Trp 75	Cys	Arg	Arg	Arg	Gly 80
Ile Glu	Glu	His	Arg 85	Leu	Tyr	Glu	Met	Ala '90	Asn	Leu	Arg	Arg	Gln 95	Phe
Lys Glu		Leu 100 <sup>.</sup>	Glu	Asp	His	Gly	Leu 105	Leu	Ala	Gly	Ala	Gln 110	Ala	Ala
Gln Val	Gly 115	Asp	Ser	Tyr	Ser	Arg 120	Leu	Gln	Gln	Arg	Arg 125	Glu	Arg	Arg
Ala Leu 130	His	Gln	Leu	Lys	Arg 135	Gln	His	Glu	Glu	Gly 140	Ala	Xaa	Cys	Arg
Arg Lys 145	Val	Leu	Arg	Leu 150	Gln	Glu	Glu	Gln	Asp 155	Gly	Gly	Ser	Ser	Asp 160
Glu Asp	Arg .	Ala	Gly 165	Pro	Ala	Pro	Pro	Gly 170	Ala	Ser	Asp	Gly	Val 175	Asp
Ile Gln		Val 180	Lуs	Phe	Lys	Leu	Arg 185	His	Asp	Leu	Ala	Gln 190	Leu	Gln
Ala Ala	Ala 195	Ser	Ser	Ala	Gln	As <u>p</u> 200	Leu	Ser	Arg	Glu	Gln 205	Leu	Ala	Leu
Leu Lys 210	Leu	Val	Leu	Gly	Arg 215	Gly	Leu	Tyr	Pro	Gln 220	Leu	Ala `	Val	Pro
Asp Ala 225	Phe	Asn	Ser	Ser 230		Lys	Asp	Ser	Asp 235	Gln	Ile	∙Phe	His	Thr 240
Gln Ala	Lys	Gln	Gly 245	Àla	Val	Leu	His	Pro 250	Thr	Cys	Val	Phe	Ala 255	Gly
Ser Pro	Glu	Val 260	Leu	His	Ala	Gln	Glu 265	Leu	Glu	Ala	Ser	Asn 270	Cýs	Asp
Gly Ser	Arg 275	Asp	Asp	Lys	Asp	Lys 280	Met	Ser	Ser	Lys	His 285	Gln	Leu	Leu
Ser Phe 290		Ser	Leu	Leu	Glu 295	Thr	Asn	Lys	Pro	Tyr 300	Leu	Val	Asn	Cys
Val Arg 305	Ile	Pro	Ala	Leu 310	Gln	Ser	Leu	Leu '	Leu 315	Phe	Ser	Arg	Ser	Leu 320
Asp Thr	Asn	_	Asp 325	-	Ser	Arg	Leu	Val 330	Ala	Asp	Gly	Trp	Leu 335	Glu

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Leu	Gln	Leu	Ala 340	-	Ser	Glu	Ser	Ala 345	Ile	Arg	Leu	Leu	Ala 350	Ala	Ser
Leu	Arg	Leu 355	Arg	Ala	Arg	Trp	Glu 360	Ser	Ala	Leų	Asp	Arg 365	Gln	Leu	Ala
His	Gln 370	Ala	Gln	Gln	Gln	Leu 375	Glu	Glu	Glu	Glu	Glu 380	Asp	Thr	Pro	Val
Ser 385	Pro	Lys	Glu	Val	Ala 390	Thr	Leu	Ser	Lys	Glu 395	Leu	Leu	Gln	Phe	Thr 400
Ala	Ser	Lys	Ile	Pro 405	Tyr	Ser	Leu	Arg	Arg 410	Leu	Thr	Gly	Leu	Glu 415	Val
Gln	Asn		Tyr 420	Val	Gly	Pro	Gln	Thr 425	Ile	Pro 	Ala	Thr	Pro 430	His	Leu
Pro	Gly	Leu 435	Phe	Gly	Ser	Ser	Thr 440	Leu	Ser	, Pro	His	Pro 445	Thr	Lys	Gly
Gly	Tyr 450	Ala	Val	Thr	Asp	Phe 455	Leu	Thr	Tyr	Asn	Cys 460	Leu	Thr	Asn	Asp
Thr 465	Asp	Leu	Tyr	Ser	Asp 470	Cys	Leu	Arg	Thr	Phe 475	Trp	Thr	Cys	Pro	His 480
Cys	Gly	Leu	His	Ala 485	Pro	Leu	Thr	Pro	Leu 490	Glu	Arg	Ile	Ala	His 495	Glu
Asn	Thr	Cys	Pro 500	Gln	Ala	Pro	Gln	Asp 505	Gly	Pro	Pro	Gly	Ala 510	Glu	Glu
Ala	Ala	Leu 515	Glu	Thr	Leu	Gln	Lys 520	Thr	Ser	Val	Leu	Gln 525	Arg	Pro	Tyr
His	Cys 530	Glu	Ala	Cys	Gly	Lys 535		Phe	Leu	Phe	Thr 540	Pro	Thr	Glu	Val
Leu 545	Arg	His	Arg	Lys	Gln 550	His	Val								
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			, abr.												
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Arg	Val	Val	Leu 20	Val	Ser	Leu	Leu	Ser 25	Ser	Ser	Gly	Gly	Gln 30	Ile	Ser
Pro	Ser	Leu 35	Ser	His	His	Leu	Pro 40	Cys	Ser	Asp	Phe	Phe 45	Glu	Leu	Glu

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Thr Ser Leu Ala Leu Phe Trp Leu Thr Thr Leu Val Pro Ser Ile Thr 50 55 60

Asn Ile Thr Arg Val Phe Thr Thr Leu Leu Arg Thr Leu Met 65 70 75

<210> 1337 <211> 78<sup>.</sup> <212> PRT <213> Homo sapiens <400> 1337 Met Ser Leu Tyr Gly Thr Arg Trp Arg Ile Ser Trp Pro His Trp Arg 1 5 10 15 . Arg Val Val Leu Val Ser Leu Leu Ser Ser Ser Gly Gly Gln Ile Ser 20 . 25 30 Pro Ser Leu Ser His His Leu Pro Cys Ser Asp Phe Phe Glu Leu Glu 40 45 35 Thr Ser Leu Ala Leu Phe Trp Leu Thr Thr Leu Val Pro Ser Ile Thr . 55 50 . 60 Asn Ile Thr Arg Val Phe Thr Thr Leu Leu Arg Thr Leu Met . 65 70.` 75 <210> 1338 <211> 159 <212> PRT <213> Homo sapiens <400> 1338 Met Gly Cys Leu Trp Gly Leu Ala Leu Pro Leu Phe Phe Phe Cys Trp 1 5 10 Glu Val Gly Val Šer Gly Ser Ser Ala Gly Pro Ser Thr Arg Arg Ala 20 25 • 30 Asp Thr Ala Met Thr Thr Asp Asp Thr Glu Val Pro Ala Met Thr Leu 35 40 45 Ala Pro Gly His Ala Ala Leu Glu Thr Gln Thr Leu Ser Ala Glu Thr 50 - 55 60 . Ser Ser Arg Ala Ser Thr Pro Ala Gly Pro Ile Pro Glu Ala Glu Thr 65 70 75 80 Arg Gly Ala Lys Arg Ile Ser Pro Ala Arg Glu Thr Arg Ser Phe Thr 85 90 95 Lys Thr Ser Pro Asn Phe Met Val Leu Ile Ala Thr Ser Val Glu Thr 100 105 . 110 Ser Ala Ala Ser Gly Ser Pro Glu Gly Ala Arg Met Thr Thr Val Gln 115 . 120 125

Thr Ile Thr Gly Ser Asp Pro Arg Lys Pro Ser Leu Thr Pro Phe Ala · 140 130 135 Pro Met Thr Ala Leu Lys Arg Gln Arg His Ser Gln Trp Thr Tyr 150 145 155 <210> 1339 <211> 149 <212> PRT ' <213> Homo sapiens <220> <221> SITE <222> (114) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (123) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1339 Met Gly Cys Leu Trp Gly Leu Ala Leu Pro Leu Phe Phe Phe Cys Trp 10 15 1 5 Glu Val Gly Val Ser Gly Ser Ser Ala Gly Pro Ser Thr Arg Arg Ala . 25 20 . 30 Asp Thr Ala Met Thr Thr Asp Asp Thr Glu Val Pro Ala Met Thr Leu 35 40 . 45 Ala Pro Gly His Ala Ala Leu Glu Thr Gln Thr Leu Ser Ala Glu Thr 50 55 60 · . Ser Ser Arg Ala Ser Thr Pro Ala Gly Pro Ile Pro Glu Ala Glu Thr 65 70 75 80 Arg Gly Ala Lys Arg Ile Ser Pro Ala Arg Glu Thr Arg Ser Phe Thr 85 90 95 . Lys Thr Ser Pro Asn Phe Met Val Leu Ile Ala Thr Ser Val Glu Thr 100 . 105 110 Ser Xaa Ala Ser Gly Ser Pro Glu Gly Ala Xaa Met Thr Val Gln 115 120 125 Thr Ile Thr Gly Ser Asp Pro Arg Glu Ala Ile Phe Asp Thr Leu Xaa 130 135 · 140 Thr Asp Asp Ser Ser

145

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275 280 285 Gly Ser Asp Val Thr Leu Leu Ala Glu Ala Leu Val Ser Val Thr Asn 290 295 300 Ile Glu Val Ile Asn Cys Ser Ile Thr Glu Ile Glu Thr Thr Ser 305 310 315 320 Ser Ile Pro Gly Ala Ser Asp Thr Asp Leu Ile Pro Thr Glu Gly Val 325 330 335 Lys Ala Ser Ser Thr Ser Asp Pro Pro Ala Leu Pro Asp Ser Thr Glu 345 . 340 350 Ala Lys Pro His Ile Thr Glu Val Thr Ala Ser Ala Glu Thr Leu Ser 355 ·360 365 Thr Ala Gly Thr Thr Glu Ser Ala Ala Pro Asp Ala Thr Val Gly Thr 370 375 380 Pro Leu Pro Thr Asn Ser Ala Thr Glu Arg Glu Val Thr Ala Pro Gly 385 390 395 400 Ala Thr Thr Leu Ser Gly Ala Leu Val Thr Val Ser Arg Asn Pro Leu 405 410 415 Glu Glu Thr Ser Ala Leu Ser Val Glu Thr Pro Ser Tyr Val Lys Val 420 425 430 Ser Gly Ala Ala Pro Val Ser Ile Glu Ala Gly Ser Ala Val Gly Lys 435 440 445 Thr Thr Ser Phe Ala Gly Ser Ser Ala Ser Ser Tyr Ser Pro Ser Glu 455 . 460 450 . Ala Ala Leu Lys Asn Phe Thr-Pro Ser Glu Thr Pro Thr Met Asp Ile 465 470 475 - 480 Ala Thr Lys Gly Pro Phe Pro Thr Ser Arg Asp Pro Leu Pro Ser Val 485 490 495 Pro Pro Thr Thr Thr Asn Ser Ser Arg Gly Thr Asn Ser Thr Leu Ala . 500 505 510 Lys Ile Thr Thr Ser Ala Lys Thr Thr Met Lys Pro Pro Thr Ala Thr 515 520 525 Pro Thr Thr Ala Arg Thr Arg Pro Thr Thr Asp Val Ser Ala Gly Glu 535 540 Asn Gly Gly Phe Leu Leu Leu Arg Leu Ser Val Ala Ser Pro Glu Asp545550555560 Leu Thr Asp Pro Arg Val Ala Glu Arg Leu Met Gln Gln Leu His Arg 565 570 575 Glu Leu His Ala His Ala Pro His Phe Gln Val Ser Leu Leu Arg Val 580 585 590 ·

Arg Arg Gly .

595

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Asn Leu Asn Tyr Ser Ala Arg Gln Arg Glu Glu Ile Lys Phe Ser His 100 105 110

Thr Glu ·

<210> 1343 <211> 114 <212> PRT <213> Homo sapiens <400> 1343 Met Trp Asn Pro Trp Ile Ala Met Cys Leu Leu Gly Leu Ser Tyr Ser · 1 5 10 Leu Leu Ala Cys Ala Leu Trp Pro Met Val Ala Phe Val Val Pro Glu 20 25 30 His Gln Leu Gly Thr Ala Tyr Gly Phe Met Gln Ser Ile Gln Asn Leu 35 40 45 Gly Leu Ala Ile Ile Ser Ile Ile Ala Gly Met Ile Leu Asp Ser Arg 55 50 60 Gly Tyr Leu Phe Leu Glu Val Phe Phe Ile Ala Cys Val Ser Leu Ser 65 . . 70 75 8.0 Leu Leu Ser Val Val Leu Leu Tyr Leu Val Asn Arg Ala Gln Gly Gly . 85. 90 95 Asn Leu Asn Tyr Ser Ala Arg Gln Arg Glu Glu Ile Lys Phe Ser His 100 . 105 110 Thr Glu <210> 1344 <211> 465 <212> PRT <213> Homo sapiens <400> 1344 Met Glu Glu Glu Asp Glu Glu Ala Arg Ala Leu Leu Ala Gly Gly Pro 5 · 1 10 · 15 Asp Glu Ala Asp Arg Gly Ala Pro Ala Ala Pro Gly Ala Leu Pro Ala 20 25 30 Leu Cys Asp Pro Ser Arg Leu Ala His Arg Leu Leu Val Leu Leu Leu 35 40 45 Met Cys Phe Leu Gly Phe Gly Ser Tyr Phe Cys Tyr Asp Asn Pro Ala 50 55 60 Ala Leu Gln Thr Gln Val Lys Arg Asp Met Gln Val Asn Thr Thr Lys 65 70 75 80

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Phe Met Leu Leu Tyr Ala Trp Tyr Ser Trp Pro Asn Val Val Leu Cys Phe Phe Gly Gly Phe Leu Ile Asp Arg Val Phe Gly Ile Arg Trp Gly Thr Ile Ile Phe Ser Cys Phe Val Cys Ile Gly Gln Val Val Phe Ala . 125 . Leu Gly Gly Ile Phe Asn Ala Phe Trp Leu Met Glu Phe Gly Arg Phe . 140 Val Phe Gly Ile Gly Gly Glu Ser Leu Ala Val Ala Gln Asn Thr Tyr Ala Val Ser Trp Phe Lys Gly Lys Glu Leu Asn Leu Val Phe Gly Leu Gln Leu Ser Met Ala Arg Ile Gly Ser Thr Val Asn Met Asn Leu Met · ·190 Gly Trp Leu Tyr Ser Lys Ile Glu Ala Leu Leu Gly Ser Ala Gly His Thr Thr Leu Gly Ile Thr Leu Met Ile Gly Gly Ile Thr Cys Ile Leu Ser Leu Ile Cys Ala Leu Ala Leu Ala Tyr Leu Asp Gln Arg Ala Glu · 230 Arg Ile Leu His Lys Glu Gln Gly Lys Thr Gly Glu Val Ile Lys Leu Thr Asp Val Lys Asp Phe Ser Leu Pro Leu Trp Leu Ile Phe Ile Ile Cys Val Cys Tyr Tyr Val Ala Val Phe Pro Phe Ile Gly Leu Gly Lys · Val Phe Phe Thr Glu Lys Phe Gly Phe Ser Ser Gln Ala Ala Ser Ala Ile Asn Ser Val Val Tyr Val Ile Ser Ala Pro Met Ser Pro Val Phe Gly Leu Leu Val Asp Lys Thr Gly Lys Asn Ile Ile Trp Val Leu Cys. 335 . Ala Val Ala Ala Thr Leu Val Ser His Met Met Leu Ala Phe Thr Met 350 . Trp Asn Pro Trp Ile Ala Met Cys Leu Leu Gly Leu Ser Tyr Ser Leu Leu Ala Cys Ala Leu Trp Pro Met Val Ala Phe Val Val Pro Glu His Gln Leu Gly Thr Ala Tyr Gly Phe Met Gln Ser Ile Gln Asn Leu Gly 

Leu Ala Ile Ile Ser Ile Ile Ala Gly Met Ile Leu Asp Ser Arg Gly 405 410 ' 415 Tyr Leu Phe Leu Glu Val Phe Phe Ile Ala Cys Val Ser Leu Ser Leu 420 425 430 Leu Ser Val Val Leu Leu Tyr Leu Val Asn Arg Ala Gln Gly Gly Asn 435 440 445 Leu Asn Tyr Ser Ala Arg Gln Arg Glu Glu Ile Lys Phe Ser His Thr 450 455 460 Glu 465 -<210> 1345 <211> 83 <212> PRT <213> Homo sapiens <400> 1345 Met Gly Leu Lys Ala Leu Pro Glu Pro Phe Met Ser Leu Val Ser His 1 5 10 15 Leu Leu Arg Thr Phe Phe Leu Val Trp Phe Val Gly Leu Pro Val Ala 20 25 30 Ile Leu Gly Asn Leu Leu Glu Cys Tyr Ala Asn Val Phe Thr Gly Asn . 35 40 45 Gly Gly Gly Pro Glu Pro Trp Gly Gly His Leu Val Ser Glu Cys Leu 50 55 60 Ala Leu Pro Gln Leu Gly Ile Gln Tyr Leu Ala Leu Ser Gly Gly Ile 65 70 . 75 80 Ile Trp Leu . <210> 1346 · <211> 73 <212> PRT <213> Homo sapiens <400> 1346 Met Ser Leu Val Ser His Leu Leu Arg Thr Phe Phe Leu Val Trp Phe 1 5 10 · . 15 Val Gly Leu Pro Val Ala Ile Leu Gly Asn Leu Leu Glu Cys Tyr Ala 20 25 · 30 Asn Val Phe Thr Gly Asn Gly Gly Gly Pro Glu Pro Trp Gly Gly His 35 40 45 Leu Val Ser Glu Cys Leu Ala Leu Pro Gln Leu Gly Ile Gln Tyr Leu .

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Phe Thr Ile Val Pro Phe Ser Val Leu Arg Ser Met Leu Ser Lys Val 130 135 140 Val Arg Ser Thr Glu Gln Gly Thr Leu Phe Ala Cys Ile Ala Phe Leu . 150 145 155 160 Glu Thr Leu Gly Gly Val Thr Ala Val Ser Thr Phe Asn Gly Ile Tyr 165 • 170 175 Ser Ala Thr Val Ala Trp Tyr Pro Gly Phe Thr Phe Leu Leu Ser Ala 180 . - 185 190 Gly Leu Leu Leu Pro Ala Ile Ser Leu Cys Val Val Lys Cys Thr 195 200 . 205 Ser Trp Asn Glu Gly Ser Tyr Glu Leu Leu Ile Gln Glu Glu Ser Ser 210 215 220 . Glu Asp Ala Ser Asp Arg 225 230 <210> 1351 <211> 137 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (111) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (123) <223> Xaa equals any of the naturally occurring L-amino acids . <400> 1351 Met Tyr Leu Gln Val Glu Thr Arg Thr Ser Ser Arg Leu His Leu Lys 1 5 10 15 Arg Ala Pro Gly Ile Arg Ser Trp Ser Leu Leu Val Gly Ile Leu Ser 20 25 30 Ile Gly Leu Ala Ala Ala Tyr Tyr Ser Gly Asp Ser Leu Gly Trp Lys 35 40 45 Leu Phe Tyr Val Thr Gly Cys Leu Phe Val Ala Val Gln Asn Leu Glu 50 55 60 Asp Trp Glu Glu Ala Ile Phe Asp Lys Ser Thr Gly Lys Val Val Leu 65 70 75 80

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Lys Thr Phe Ser Leu Tyr Lys Lys Leu Leu Thr Leu Phe Arg Ala Gly 85 90 . 95 His Asp Gln Val Val Leu Leu His Asp Val Arg Asp Val Xaa Val 100 . 105 110 Glu Glu Glu Xaa Val Arg Tyr Phe Gly Lys Xaa Tyr Met Val Val Leu 120 115 125 Arg Leu Ala Thr Gly Phe Phe His Pro 130 135 <210> 1352 <211> 124 <212> PRT <213> Homo sapiens <400> 1352 Met Tyr Leu Gln Val Glu. Thr Arg Thr Ser Ser Arg Leu His Leu Lys 1 5 10 15 Arg Ala Pro Gly Ile Arg Ser Trp Ser Leu Leu Val Gly Ile Leu Ser 20 . 25 30 Ile Gly Leu Ala Ala Ala Tyr Tyr Ser Gly Asp Ser Leu Gly Trp Lys . 35 40 45 Leu Phe Tyr Val Thr Gly Cys Leu Phe Val Ala Val Gln Asn Leu Glu 50 55 60 Asp Trp Glu Glu Ala Ile Phe Asp Lys Ser Thr Gly Lys Val Val Leu 65 70 75 80 Lys Thr Phe Ser Leu Tyr Lys Lys Leu Leu Thr Leu Phe Arg Ala Gly 85 90 95 His Asp Gln Val Val Val Leu Leu His Asp Val Arg Ser Gly Cys Gln . 100 105 110 Ser Leu Val Ala Gly Gln Gly His His Asn His Lys · 120 115 <210> 1353 <211> 145 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (123) <223> Xaa equals any of the naturally occurring L-amino acids <220> . <221> SITE -<222> (135) <223> Xaa equals any of the naturally occurring L-amino acids

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Gly Thr Ala Ile Gln Cys Val Arg Phe Lys Val Ser Ala Arg Leu Gln 35 40 45 Gly Ala Ser Trp Asp Thr Gln Asn Gly Pro Gln Glu Arg Leu Ala Gly 50 55 60 Glu Val Ala Arg Ser Pro Leu Lys Glu Phe Xaa Lys Glu Lys Ala Trp 65 70 75 80 Arg Ala Val Val Val Gln Met Ala Gln 85 <210> 1355 <211> 89 <212> PRT <213> Homo sapiens <400> 1355 Met Phe Lys Asp Tyr Pro Pro Ala Ile Lys Pro Ser Tyr Asp Val Leu 1 5 10 15 Leu Leu Leu Leu Leu Val Leu Leu Leu Gln Ala Gly Leu Asn Thr 20 25 30 Gly Thr Ala Ile Gln Cys Val Arg Phe Lys Val Ser Ala Arg Leu Gln 45 35 40 Gly Ala Ser Trp Asp Thr Gln Asn Gly Pro Gln Glu Arg Leu Ala Gly 55 -50 60 Glu Val Ala Arg Ser Pro Leu Lys Glu Phe Asp Lys Glu Lys Ala Trp 75 65 70 80 Arg Ala Val Val Gln Met Ala Gln 85 <210> 1356 <211> 419 <212> PRT <213> Homo sapiens <400> 1356 Met Asn Asn Gln Lys Gln Gln Lys Pro Thr Leu Ser Gly Gln Arg Phe 5 15 . 10 1 Lys Thr Arg Lys Arg Asp Glu Lys Glu Arg Phe Asp Pro Thr Gln Phe 20 25 30 . . Gln Asp Cys Ile Ile Gln Gly Leu Thr Glu Thr Gly Thr Asp Leu Glu 45 35 40 Ala Val Ala Lys Phe Leu Asp Ala Ser Gly Ala Lys Leu Asp Tyr Arg . 50 55 60 Arg Tyr Ala Glu Thr Leu Phe Asp Ile Leu Val Ala Gly Gly Met Leu

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65					70					75					80	
Ala	Pro	Gly	Gly	Thr 85	Leu	Ala	Asp	Asp	Met 90	Met	Arg	Thr	Asp	Val 95	Cys	
Val	Phe	Ala	Ala 100	Gln	Glu	Asp	Leu	Glu 105	Thr	Met	Gln	Ala	Phe 110	Ala	Gln	
Val	Phe	Asn 115	Lys	Leu	Ile	Arg	Arg 120	Tyr	Lys	Tyr	Leu	Glu 125	Lys	Gly	Phe	
Glu	Asp 130	Glu	Val	Lys	Lys	Leu 135	Leu	Leu	Phe	Leu	Lys 140	Gly	Phe	Ser	Glu	
Ser 145	Glu	Arg	Asn	Lys	Leu 150	Ala	Met	Leu	Thr	Gly 155	Val	Leu	Leu	Ala	Asn 160	
Gly	Thr	Leu	Asn	Ala 165 <sub>.</sub>		Ile	Leu	Asn	Ser 170	Leu	Tyr	Asn	Glu	Asn 175	Leu	
Val	Lys	Glu	Gly 180	Val	Ser	Ala	Ala	Phe 185	Ala	Val	Lys	Leu	Phe 190	Lys	Ser	
Trp	Ile	Asn 195	Glu	.Lys	Asp	Ile	Asn 200	Ala	Val	Ala	Ala	Ser 205	Leu	Arg	Lys	
	Ser 210	Met	Asp	Asn	Arg	Leu 215	Met	Glu	Leu		Pro 220.			Lys	Gln	
Ser 225	Val	Glu	His	Phe	Thr 230	Lys	Tyr	Phe	Thr	Glu 235	Aĺa	Gly	Leu	Lys	Glu 240	
Leu	Ser	Glu	Tyr	Val 245	Arg	Asn	Gln	Gln	Thr 250	Ile	Gly	Ala	Arg	Lys 255	Glu	
• •			260	Leu				265					270			
Asp	Ile	Ile 275	Leu	Tyr	Val	Lys	Glu 280	Glu	Met	Lys	Lys	Asn 285	Asn	Ile	Pro	. •
	290			Ile		295					300					
Glu 305	Trp	Asn	Lys	Lys	Glu 310	Glu	Leu	Val	Ala	Glu 315	Gln	Ala	Ile	Lys	His 320	
				Ser 325					330					335		
Śer	Glu	Leu	Thr 340	Leu	Leu	Leu	Lys	Ile 345	Gln	Glu	Tyr	Cys	Tyr 350	Asp	Asn	
•		355		Lys		-	360					365				
	370			Ser		375			•		380					
His	Val	Ala	Lys	Gly	Lys	Ser	Val		Leu	Glu	Gln	Met	Lys	Lys	Phe	

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385	390	395	400 .
Val Glu Trp Leu Lys	Asn Ala Glu Glu Gl	u Ser Glu Ser Glu Ala	Glu
405	41	0 415	
Glu Gly Asp			
	;		
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Leu His Phe		0 15	
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Ala Arg Gln Ser Leu	Glu Val Lys Met As	n Leu Glu Glu Gln Ser	Gln
20	25	30	
Gln Gln Glu Asn Leu	Met Leu Ser Ile Le	u Pro Lys His Val Ála	Asp
35	40	45	
Glu Met Leu Lys Asp	Met Lys Lys Asp Gl	u Ser Gln Lys Asp Gln	Gln
50	55	60	
Gln Phe Asn Thr Met	Tyr Met Tyr Arg Hi	s Glu Asn Val Ser Ile	Leu
65	70	75	80
Phe Ala Asp Ile Val	Gly Phe Thr Gln Le	u Ser Ser Ala Cys Ser	Ala
85	9	0 95	
Gln Glu Leu Val Lys	Leu Leu Asn Glu Le	u Phe Ala Arg Phe Asp	Lys
100	105	'110	
Leu Ala Ala Lys Tyr	His Gln Leu Arg Il	e Lys Ile Leu Gly Asp	Cys
115	120	125	
Tyr Tyr Cys Ile Cys	Gly Leu Pro Asp Ty	r Arg Glu Asp His Ala	Val
130	135	140	
Cys <sup>`</sup> Ser Ile Leu Met	Gly Leu Ala Met Va	l Glu Ala Ile Ser Tyr	Val
145	150	155	1 <u>6</u> 0

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Arg	Glu	Lys	Thr	Lys 165	Thr	Gly	Val	Asp	Met 170	Arg	Val	Gly	Val	His 175	Thr
Gly	Thr	Val	Leu 180	Gly	Gly	Val	Leu	Gly 185	Gln	Lys	Arg	Trp	Gln 190	Tyr	Asp
Val	Trp	Ser 195	Thr	Asp	Val	Thr	Val 200	Ala	Asn	Lys	Met	Glu 205	Ala	Gly	Gly
	Pro 210	Gly	Arg	Val	His	Ile 215	Ser	Gln	Ser	Thr	Met 220	Asp	Cys	Leu	Lys
Gly 225	Glu	Phe	Asp	Val	Glu 230	Pro	Gly	Asp	Gly	Gly 235	Ser	Arg	Cys	Asp	Tyr 240
Leu	Glu	Glu	Lys	Gly 245	Ile	Glu	Thr	Tyr	Leu 250	Ile	Ile	Ala	Ser	Lys 255	Pro
Glu	Val	Lys	Lys 260	Thr	Ala	Thr	Gln	Asn 265	Gly	Leu	Asn	Gly		Ala	Leu
		Gly 275					280					285			
	290	Lys				295 <sub>.</sub>					300			••	
305		Pro			310					315					320
۰.		Arg		325					330				-	335	
		Ser	340					345					350		
		Glu 355					360					365			
	370	Ser				375	-				380		-	-	
385		Lys			390					395					400
		Leu		405					410					415	
		Asn	420					425					430		
		Ile 435 Wal					440					445			
	450	Val				455					460				
Asn 465	Thr	Trp	Ala	Met	Leu 470	Ala	11e	Phe	Ile	Leu 475	Val	Met	Ala	Asn	Val 480

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Val	Asp	Met	Val	Ser 485	His	Met	Val	Lys	Leu 490	Thr	Leu	Met	Leu	Leu 495	Val	÷
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Asp	Glu	Tyr 515	Asp	His	Lys	Arg	Phe 520	Arg	Glu	His	Asp	Leu 525	Pro	Met	Val	
Ala	Leu 530	Glu	Gln	Met	Gln	Gly 53 <u>,</u> 5	Phe ,	Asn	Pro	Gly	Leu 540	Asn	Gly	Thr	Asp	
Arg 545	Leu	Pro	Leu		Pro 550	Ser	Lys	Tyr	Ser	Met 555	Thr	Val	Met	Val	Phe 560	
Leu	Met	Met	Leu	Ser 565	Phe	Tyr	Tyr	Phe	Ser 570	Arg	His	Val	Glu	Lys 575	Leu	
Ala	Arg	Thr	Leu 580	Phe	Leu	Trp	Lys	Ile 585	Glu	Val	His	Asp	Gln 590	Lys	Glu	
Arg	Val	Tyr 595	Glu	Met	Arg	Årg∙	Trp 600	Asn	Glu	Ala	Leu	Val 605	Thr	Asn	Met	
Leu	Pro 610	Glu	His	Val	Ala	Arg 615	His	Phe	Leu	Gly	Ser 620	Lys	Lys	Arg	Asp	
-Glu 625	Glu	Leu	Tyr	Ser	Gln 630	Thr	Tyr	Asp	Glu	Ile 635	Gly	Val	Met	Phe	Ala 640	
Ser	Leu	Pro	Asn	Phe 645	Ala	Asp	Phe	Tyr	Thr 650	Glu	Glu	Ser	Ile	Asn 655	Asn	
Gly	Gly	Ile	Glu 660	Cys	Leu	Arg	Phe	Leu 665	Asn	Glu	Ile	Ile	Ser 670	Asp	Phe	
		675	Leu				680					685	-		-	
	690	•	Ser			695					700					
705			Gly		710					715			-		720	
		•	Gln	725					730					735		
		-	Leu 740			•		745					750			
		755	Gly	•			760			-		765				
Ala	Arg 770	Lys	Pro	His	Tyr	Asp 775	Ile	Trp	Gly	Asn	Thr 780	Val	Asn	Val	Ala	
Ser 785	Arg	Met	Glu	Ser	Thr 790	Gly	Val	Met	Gly	Asn 795	Ile	Gln	Val	Val	Glu 800	

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Glu Thr Gln Val Ile Leu Arg Glu Tyr Gly Phe Arg Phe Val Arg Arg 805 810 815 Gly Pro Ile Phe Val Lys Gly Lys Gly Glu Leu Leu Thr Phe Phe Leu 820 . 825 830 Lys Gly Arg Asp Lys Leu Ala Thr Phe Pro Asn Gly Pro Ser Val Thr 835 840 845 Leu Pro His Gln Val Val Asp Asn Ser 850 -855 <210> 1359 <211> 188 <212> PRT <213> Homo sapiens <400> 1359 Met Val Pro Gly Ala Ala Gly Trp Cys Cys Leu Val Leu Trp Leu Pro 1 10 15 Ala Cys Val Ala Ala His Gly Phe Arg Ile His Asp Tyr Leu Tyr Phe 20 25 30 Gln Val Leu Ser Pro Gly Asp Ile Arg Tyr Ile Phe Thr Ala Thr Pro . . . 35 Ala Lys Asp Phe Gly Gly Ile Phe His Thr Arg Tyr Glu Gln Ile His 50 55 60 Leu Val Pro Ala Glu Pro Pro Glu Ala Cys Gly Glu Leu Ser Asn Gly 65 70 75 80 Phe Phe Ile Gln Asp Gln Ile Ala Leu Val Glu Arg Gly Gly Cys Ser 85 95 90 Phe Leu Ser Lys Thr Arg Val Val Gln Glu His Gly Gly Arg Ala Val 100 105 110 Ile Ile Ser Asp Asn Ala Val Asp Asn Asp Ser Phe Tyr Val Glu Met 115 125 120 Ile Gln Asp Ser Thr Gln Arg Thr Ala Asp Ile Pro Ala Leu Phe Leu 130 135 140 Leu Gly Arg Asp Gly Tyr Met Ile Arg Arg Ser Leu Glu Gln His Gly 145 150 155 160 Leu Pro Trp Ala Ile Ile Ser Ile Pro Val Asn Val Thr Ser Ile Pro 165 . 170 175 Thr Phe Glu Leu Leu Gln Pro Pro Trp Thr Phe Trp 180 185

<210> 1360 <211> 188

806 .

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Gly Phe Val Tyr Phe Pro Cys Phe Thr Phe Pro Xaa Val Gln Ala Val 20 · 25 30 Val Glu Thr Gly Thr Gln Gly Leu Cys Val Ala Pro Cys Ser Ser Cys 40 35 45 Leu Gln Glu Ala Cys Gly Ala Leu Val Ser Leu Ala Ser Cys Pro Pro ·50 55 60 Phe Leu Leu Pro Pro Leu Thr Leu Pro Pro Thr Leu Ser Leu Arg Thr 65 70 75 80 . : Ser Ser Trp Lys Gly Leu Ala Arg Ala Xaa Val Leu Ala Ser Leu Trp 85 90 95 Gly Gly Arg Leu Cys Gly Leu Lys Gly Cys Arg Leu Lys Leu Gln Gly 100 105 110 Val Gly Ala Trp 115 . <210> 1362 <211> 167 <212> PRT <213> Homo sapiens <400> 1362 Met Arg Lys Ile. His Thr Pro Leu Phe Asn Leu Leu Gln Val Arg Leu 1 5 10 15 Gly Phe Val Tyr Phe Pro Cys Phe Thr Phe Pro Cys Val Gln Ala Val 20 25 . 30 · · Val Glu Thr Gly Thr Gln Gly Leu Cys Val Ala Pro Cys Ser Ser Cys 40 45 Leu Gln Glu Ala Cys Gly Ala Leu Val Ser Leu Ala Ser Cys Pro Pro . 50 55 60 Phe Leu Leu Pro Pro Leu Thr Leu Pro Pro Thr Leu Ser Leu Arg Thr 65 70 75 80 Ser Ser Trp Lys Gly Leu Ala Arg Ala Cys Val Leu Ala Ser Leu Trp 85 90 🕔 95 Gly Gly Arg Leu Cys Gly Leu Lys Gly Cys Arg Leu Lys Leu Gln Gly 100 . 105 110 Val Gly Ala Trp Glu Gly Met Cys Thr Ala Leu Leu Thr Asp Pro Phe 115 120 125 Met Phe Ser Phe Phe Asp Ser Val Leu Cys Cys Pro Asp Gly Gly Val 130 135 140 Ser Pro Cys Leu Leu Pro Phe Leu Pro Trp Thr Leu Ala Ile Gly Pro 145 150 . 155 - 160

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Asp Glu Arg Val His Val Val 165 <210> 1363 <211> 286 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (204) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (224) ç <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (228) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (264) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (271) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1363 Met Tyr Leu Ser Ala Leu Gln Ser Leu Ile Pro Ser Leu Phe Ala Leu 1 5 10 15 Val Leu Gln Asn Ala Pro Phe Ser Ser Lys Ala Lys Leu His Gly Glu 20 25 30 Val Pro Gln Ile Glu Val Thr Arg Phe Pro Arg Pro Met Ser Pro Leu 35 40 45 Gln Asp Val Ser Thr Ile Ile Gly Ser Arg Glu Gln Leu Ala Val Leu 50 55 60 Leu Gln Leu Tyr Asp Tyr Gln Leu Glu Gln Glu Gly Thr Thr Gly Trp 65 70 75 80 Glu Ser Leu Leu Trp Val Val Asn Gln Leu Leu Pro Gln Leu Ile Glu . 85 90 . 95 Ile Val Gly Lys Ile Asn Val Thr Ser Thr Ala Cys Val His Glu Phe 100 105 110 Ser Arg Phe Phe Trp Arg Leu Cys Arg Thr Phe Gly Lys Ile Phe Thr

115 120 125

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Asn Thr Lys Val Lys Pro Gln Phe Gln Glu Ile Leu Arg Leu Ser Glu 130 135 140 Glu Asn Ile Asp Ser Ser Ala Gly Asn Gly Val Leu Thr Lys Ala Thr 145 150 155 160 Val Pro Ile Tyr Ala Thr Gly Val Leu Thr Cys Tyr Ile Gln Glu Glu 165 170 175 Asp Arg Lys Leu Leu Val Gly Phe Leu Glu Asp Val Met Thr Leu Leu 180 185 190 Ser Leu Ser His Ala Pro Leu Asp Ser Leu Lys Xaa Ser Phe Val Glu 195 200 205 Leu Gly Ala Asn Gln Ala Tyr His Glu Leu Leu Leu Thr Val Leu Xaa 210 215 220 Tyr Gly Val Xaa His Thr Ser Ala Leu Val Arg Cys Thr Ala Ala Arg 225 230 235 . 240 Met Phe Glu Leu Leu Val Lys Gly Val Asn Glu Thr Leu Val Ala Gln 245 -250 255 Arg Val Val Pro Ala Leu His Xaa Leu Ser Pro Val Asp Pro Xaa Asn 260 265 270 . ` Leu Cys Gln Asp Cys His Asn Phe Gln Pro Leu Gly Leu Phe 275 280 285 <210> 1364 <211> 283 <212> PRT <213> Homo sapiens <400> 1364 Met Tyr Leu Ser Ala Leu Gln Ser Leu Ile Pro Ser Leu Phe Ala Leu 5 10 . 15 Val Leu Gln Asn Ala Pro Phe Ser Ser Lys Ala Lys Leu His Gly Glu 20 25 30 Val Pro Gln Ile Glu Val Thr Arg Phe Pro Arg Pro Met Ser Pro Leu 35 40 45 Gln Asp Val Ser Thr Ile Ile Gly Ser Arg Glu Gln Leu Ala Val Leu 50 55 60

Leu Gln Leu Tyr Asp Tyr Gln Leu Glu Glu Glu Gly Thr Thr Gly Trp 65 70 75. 80 Glu Ser Leu Leu Trp Val Val Asn Gln Leu Leu Pro Gln Leu Ile Glu

859095Ile Val Gly Lys Ile Asn Val Thr Ser Thr Ala Cys Val His Glu Phe100105110

Ser Arg Phe Phe Trp Arg Leu Cys Arg Thr Phe Gly Lys Ile Phe Thr

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115	120	125
Asn Thr Lys Val Lys Pro G 130 13		Arg Leu Ser Glu
Glu Asn Ile Asp Ser Ser Al 145 150	la Gly Asn Gly Val Leu 155	Thr Lys Ala Thr 160
Val Pro Ile Tyr Ala Thr G 165	ly Val Leu Thr Cys Tyr 170	Ile Gln Glu Glu 175
Asp Arg Lys Leu Leu Val G 180	ly Phe Leu Glu Asp Val 185	Met Thr Leu Leu 190
Ser Leu Ser His Ala Pro Le 195	eu Asp Ser Leu Lys Ala 200	Ser Phe Val Glu 205
Leu Gly Ala Asn Pro Ala Ty 210 21		Thr Val Leu Trp
Tyr Gly Val Val His Thr Se 225 230	er Ala Leu Val Arg Cys 1 235	Thr Ala Ala Arg 240
Met Phe Glu Val Cys Gln Hi 245	is Met Pro Leu Leu Val 250	Ser Ile Ile Met 255
Ile Phe Phe Phe Leu Arg Ar 		Leu Ile Lys Arg
Leu Cys Ile Ser Lys Lys Ly 275	ys Lys Lys Lys Lys 280	
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Leu Leu Ser Ala Leu Gly As 20	sp Pro Ser Glu Arg Val 25	Val Ser Ala Thr 30

His Gln Val Phe Leu Pro Ala Tyr Ala Ala Trp Thr Thr Glu Leu Gly Asn Leu Gln Ser His Leu Ile Leu Thr Leu Leu Asn Lys. Ile Glu Lys Leu Leu Arg Glu Gly Glu His Gly Leu Asp Glu His Lys Leu His Met Tyr Leu Ser Ala Leu Gln Ser Leu Ile Pro Ser Leu Phe Ala Leu Val 95 . Leu Gln Asn Ala Pro Phe Ser Ser Lys Ala Lys Leu His Gly Glu Val 110. Pro Gln Ile Glu Val Thr Arg Phe Pro Arg Pro Met Ser Pro Leu Gln Asp Val Ser Thr Ile Ile Gly Ser Arg Glu Gln Leu Ala Val Leu Leu · 130 · . 140 Gln Leu Tyr Asp Tyr Gln Leu Glu Gln Glu Gly Thr Thr Gly Trp Glu Ser Leu Leu Trp Val Val Asn Gln Leu Leu Pro Gln Leu Ile Glu Ile Val Gly Lys Ile Asn Val Thr Ser Thr Ala Cys Val His Glu Phe Ser - 180 Arg Phe Phe Trp Arg Leu Cys Arg Thr Phe Gly Lys Ile Phe Thr Asn Thr Lys Val Lys Pro Gln Phe Gln Glu Ile Leu Arg Leu Ser Glu Glu 210. Asn Ile Asp Ser Ser Ala Gly Asn Gly Val Leu Thr Lys Ala Thr Val Pro Ile Tyr Ala Thr Gly Val Leu Thr Cys Tyr Ile Gln Glu Glu Asp Arg Lys Leu Leu Val Gly Phe Leu Glu Asp Val Met Thr Leu Leu Ser Leu Ser His Ala Pro Leu Asp Ser Leu Lys Xaa Ser Phe Val Glu Leu Gly Ala Asn Gln Ala Tyr His Glu Leu Leu Leu Thr Val Leu Xaa Tyr Gly Val Xaa His Thr Ser Ala Leu Val Arg Cys Thr Ala Ala Arg Met . Phe Glu Leu Leu Val Lys Gly Val Asn Glu Thr Leu Val Ala Gln Arg Val Val Pro Ala Leu. Ile Thr Leu Ser Ser Asp Pro Glu Ile Ser Val . 340 

Gln Arg Glu Leu Leu Glu Arg Val Lys Met Gln 370 375 <210> 1366 <211> 156 <212> PRT <213> Homo sapiens <400> 1366 Met Pro Ala Leu Leu Pro Val Ala Ser Arg Leu Leu Leu Pro Arg .10 1 5 15 Val Leu Leu Thr Met Ala Ser Gly Ser Pro Pro Thr Gln Pro Ser Pro 20 25 . 30 Ala Ser Asp Ser Gly Ser Gly Tyr Val Pro Gly Ser Val Ser Ala Ala. . 35 40 45 Phe Val Thr Cys Pro Asn Glu Lys Val Ala Lys Glu Ile Ala Arg Ala 55 50 60 . Val Val Glu Lys Arg Leu Ala Ala Cys Val Asn Leu Ile Pro Gln Ile 65 70. 75 . 80 Thr Ser Ile Tyr Glu Trp Lys Gly Lys Ile Glu Glu Asp Ser Glu Val 85 90 95 Leu Met Met Ile Lys Thr Gln Ser Ser Leu Val Pro Ala Leu Thr Asp 100 105 110 Phe Val Arg Ser Val His Pro Tyr Glu Val Ala Glu Val Ile Ala Leu 115 120 125

Arg Ile Ala Thr Ile Pro Ala Phe Gly Thr Ile Met Glu Thr Val Ile

365

Pro Val Glu Gln Gly Asn Phe Pro Tyr Leu Gln Trp Val Arg Gln Val 130 135 140

Thr Glu Ser Val Ser Asp Ser Ile Thr Val Leu Pro 145 150 155

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1 5 10 15
Val Leu Leu Thr Met Ala Ser Gly Ser Pro Pro Thr Gln Pro Ser Pro
20 25 30

Ala Ser Asp Ser Gly Ser Gly Tyr Val Pro Gly Ser Val Ser Ala Ala

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35	40	. 49	5
Phe Val Thr Cys	Pro Asn Glu Lys 7	Val Ala Lys Glu Ile	Ala Arg Ala
50	55	. 60	
Val Val Glu Lys	Arg Leu Ala Ala (	Cys Val Asn Leu Ile	e Pro Gln Ile
65	70	75	80
Thr Ser Ile Tyr	Glu Trp Lys Gly 1	Lys Ile Glu Glu Asp	o Ser Glu Val
	85	90	95
Leu Met Met Ile		Ser Leu Val Pro Ala	a Leu Thr Asp
100		105	110
Phe Val Arg Ser	Val His Pro Tyr (	Glu Val Ala Glu Val	
115	120	129	
Pro Val Glu Gln	Gly Asn Phe Pro 4	Tyr Leu Gln Trp Val	Arg Gln Val
130	135	140	
Thr'Glu Ser Val	Ser Asp Ser Ile (	Thr Val Leu Pro	,
145	150	155	1
<210> 1368 <211> 442 <212> PRT <213> Homo sapie <220> <221> SITE	ns		
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<220> <221> SITE <222> (247) <223> Xaa equals	any of the natu	rally occurring L-a	mino acids
<400> 1368	• •		
Met Trp Arg Leu	Pro Gly Leu Leu (	Gly Arg Ala Leu Pro	Arg Thr Leu
1	5.	. 10	15
Gly Pro Ser Leu	Trp Arg Val Thr	Pro Lys Ser Thr Sen	r Pro Asp Gly
20		25	30
Pro Gln Thr Thr	Ser Ser Thr Leu 1	Leu Val Pro Val Pro	
35	40	45	
Arg Ser Gly Pro	His Gly Pro Gly (	Thr Ser Gly Gly Pro	Arg Ser His
50	55	60	
Gly Trp Lys Asp	Ala Phe Gln Trp 1	Met Ser Ser Arg Val	l Ser Pro Asn
65	70	75	80 <sub>(</sub>
Thr Leu Trp Asp	Ala Ile Ser Trp (	Gly Thr Leu Ala Val	Leu Ala Leu
	85	90	95
Gln Leu Ala Arg	Gln Ile His Phe (	Gln Ala Ser Leu Pro 814	Ala Gly Pro

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				100					105	•				110			
	Gln	Arg	Val 115	Glu	His	Cys	Ser	Trp 120	His	Ser	Pro	Leu	Asp 125	Arg	Phe	Phe	
	Ser	Ser 130	Pro <sub>.</sub>	Leu	Trp	His	Pro 135	Cys	Ser	Ser	Leu	Arg 140	Gln	His	Ile	Leu	
	Pro 145	Ser	Pro	Asp	Gly	Pro 150	Ala	Pro	Arg	His	Thr 155	Gly	Leu	Arg	Glu	Pro 160	
	Arg	Leu	Gly	Xaa	Glu 165	Glu	Ala	Ser	Ala	Gln 170	Pro	Arg	Asn	Phe	Ser 175	His	
	Asn	Ser	Leu	Arg 180	Gly	Ala	Arg ,	Pro	Gln 185	Asp	Pro	Ser	Glu	Glu 190	Gly	Pro	
	Gly	Asp	Phe 195	Gly	Phe	Leu	His	Ala 200	Ser	Ser	Ser	Ile	Glu 205	Ser	Glu	Ala	
	Lys	Pro 210	Ala	Gln	Pro	Gln	Pro 215	Thr	Gly	Glu	Lys	Glu 220	Gln	Asp	Lys	Ser	
	Lys 225	Thr	Leu	Ser	Leu	Glu 230	Glu	Ala.	Val	Thr	Ser 235	Ile	Gln	Gln	Leu	Phe 240	
	Gln	Leu	Ser	Val	Ser 245	Ile	Xaa	Phe	Asn	Phe 250	Leu	Gly	Thr	Glu	Asn 255	Met	
	Lys	Ser	Gly	Asp 260	His	Thr	Ala	Ala	Phe <sup>-</sup> 265	Ser	Tyr	Phe	Gln	Lys 270	Ala	Ala	
	Ala	Arg	Gly 275	Tyr	Ser	Lys	Ala	Gln 280	Tyr	Asn	Ala	Gly	Leu 285	Cys	His	Glu	
	His .	Gly 290	Arg	Gly	Thr	Pro	Arg 295	Asp	Ile	Ser	Lys	Ala 300	Val	Leu	Tyr	Tyr	
	Gln 305	Leu	Ala	Ala	Ser	Gln 310	Gly	His	Ser	Leu	Ala 315	Gln	Tyr	Arg	Tyr	Ala 320	
•	Arg	Cys	Leu	Leu	Arg 325	Asp	Pro	Ala	Ser	Ser 330	Trp	Asn	Pro	Glu	Arg 335	Gln	
	Arg	Ala	Val	Ser 340	Leu	Leu	Lys	Gln	Ala 345	Ala	Asp	Ser	Gly	Leu 350	Arg	Glu	
	Ala	Gln	Ala 355	Phe	Leu	Gly	Val	Leu 360	Phe	Thr	Lys	Glu	Pro 365	Týr	Leu	Asp	
	Glu	Gln 370	Arg	Ala	Val	Lys	Tyr 375	Leu	Trp	Leu	Ala	Ala 380	Asn	Asn '	Gly	Asp	
	Ser 385	Gln	Ser	Arg	Tyr	His 390	Leu	Gly	Ile	Cys	Tyr 395	Glu	Lys	Gly	Leu	Gly 400	
		-			405	Gly				410	•			•	415	•	
	Ala	Leu	Gly	Asn	Glu	Ala	Ala	Gln		Arg 315	Leu	Arg	Ala	Leu	Phe	Ser	

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425 420 430 Met Gly Ala Ala Ala Gly Gly Pro Ala Thr 435 440 <210> 1369 <211> 84 <212> PRT <213> Homo sapiens . . <400> 1369 Met Gly Leu Arg Leu Pro Pro Pro Leu Cys Trp Phe Leu Cys Leu Thr 5 1. 10 15 Ser Thr Gly Gln Val Pro Met Ala Gln Ala Arg Ala Gly Val Gln Gly 20 ·· 25 30 Pro Met Asp Gly Arg Met Pro Ser Asn Gly Cys Leu Pro Val Ser Pro 35 • 40 45 . Arg Thr Pro Tyr Gly Met Pro Tyr Leu Gly Ala Leu Trp Pro Cys Trp 50 55 60 Pro Cys Ser Trp Gln Gly Arg Ser Thr Ser Arg His Pro Cys Gln Gln 65 70 . 75 . 80 Asp Leu Ser Gly <210> 1370 <211> 129 <212> PRT <213> Homo sapiens <400> 1370 Met Val Gly Val Gln Ile Trp Thr Leu Thr Cys Cys Val Ile Leu Val 1 5 . 10 . 15 Val Val Leu Pro Phe Ser Val Pro His Ser Leu Ile Cys Arg Met Gly 20 25 30 Leu Ile Ala Thr Ser Val Leu Gln Gly His Gly Lys Ser Lys Met Ile 35 . 40 ۰. 45 Asn Ala Thr Val Cys Leu Ala Leu Gly Leu Pro Arg Val Pro Arg Glu 50 55 60 -Asp Gln Leu Ile Val Ser Leu Asp Pro Gln Ser Ser Glu Ser Ala Ser 65 . 70 75 80 Leu Glu Ala Leu Leu Lys Tyr Ser Phe Leu Gly Pro Pro Ser Leu Phe · 85 90 . 95 . Pro Ile Gln Trp Ser Gly Leu Gly Leu Ser Ile Ser Val Ser Tyr Gln

105 110

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Phe Gln Val Thr Leu Val Pro Leu Ala Trp Gly Pro Asn Ser Gln Asp 120 115 125 Pro <210> 1371 <211> 53 <212> PRT <213> Homo sapiens : . <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> .<221> SITE <2223 (52) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (53) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1371 Xaa Xaa Asp Thr Gln Gly Arg Val Arg Gly Arg His Glu Glu Trp Gly 1 5 10 15 Gly Arg Arg Trp Arg Lys Glu Gly Ser Glu Gln Arg Ala Pro Gly Met 20 25 30 Ala Trp Lys Arg Leu Ser Pro Trp Ile Leu Trp Val Gly Ala Ser Gly 35 40 45 Leu Thr Ser Xaa Xaa 50 <210> 1372 <211> 129 <212> PRT <213> Homo sapiens <400> 1372 Met Val Gly Val Gln Ile Trp Thr Leu Thr Cys Cys Val Ile Leu Val 1 5 10 15 Val Val Leu Pro Phe Ser Val Pro His Ser Leu Ile Cys Arg Met Gly 20 25 30

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Leu Ile Ala Thr Ser Val Leu Gln Gly His Gly Lys Ser Lys Met Ile 35 40 45 . Asn Ala Thr Val Cys Leu Ala Leu Gly Leu Pro Arg Val Pro Arg Glu . 50 55 60 Asp Gln Leu Ile Val Ser Leu Asp Pro Gln Ser Ser Glu Ser Ala Ser 70 75 65 80 Leu Glu Ala Leu Leu Lys Tyr Ser Phe Leu Gly Pro Pro Ser Leu Phe · 90 85 95 . Pro Ile Gln Trp Ser Gly Leu Gly Leu Ser Ile Ser Val Ser Tyr Gln 100 105 · 110 •• Phe Gln Val Thr Leu Val Pro Leu Ala Trp Gly Pro Asn Ser Gln Asp 115 120 125 Pro · <210> 1373 <211> 117 <212> PRT <213> Homo sapiens . <220> <221> SITE <222> (114) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1373 Met Gly Phe Leu Phe Leu Leu Gly Leu Tyr Ile Ser Ser Leu Ala Ser . 1 ' 5 10 15 Cys Met Gly Gly Leu Tyr Gly Ala Pro Arg Ile Leu Gln Cys Ile Ala 20 25 Gln Glu Lys Val Ile Pro Ala Leu Ala Cys Leu Gly Gln Gly Lys Gly 35 40 45. . Pro Asn Lys Thr Pro Val Ala Ala Ile Cys Leu Thr Ser Leu Val Thr 50 55 · 60 Met Ala Phe Val Phe Val Gly Gln Val Asn Val Leu Ala Pro Ile Val 70 75 • • 80 65 . Thr Ile Asn Phe Met Leu Thr Tyr Val Ala Val Asp Tyr Ser Tyr Phe . 95 . 85 -90 Ser Leu Ser Met Cys Ser Cys Ser Leu Thr Pro Val Pro Glu Pro Val 100 105 110 Leu Xaa Glu Gly Ala <u>, 115</u>. ۰.

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Cys Met Gly Gly Leu Tyr Gly Ala Pro Arg Ile Leu Gln Cys Ile Ala 20 25 30 ŧ

Gln Glu Lys Val Ile Pro Ala Leu Ala Cys Leu Gly Gln Gly Lys Gly 40 35 45 Pro Asn Lys Thr Pro Val Ala Ala Ile Cys Leu Thr Ser Leu Val Thr 55 50 . 60 Met Ala Phe Val Phe Val Gly Gln Val Asn Val Leu Ala Pro Ile Val 65 . 70 75 . Thr Ile Asn Phe Met Leu Thr Tyr Val Ala Val Asp Tyr Ser Tyr Phe 85 90 Ser Leu Ser Met Cys Ser Cys Ser Leu Thr Pro Val Pro Glu Pro Val 105 110 100 Leu Xaa Glu Gly Ala Glu Gly Leu His Cys Ser Glu His Leu Leu . 115 120 125 Glu Lys Ala Pro Ser Tyr Gly Ser Glu Gly Pro Ala Gln Arg Val Leu . 130 135 • • 140 Glu Gly Thr Leu Leu Glu Phe Thr Lys Asp Met Asp Gln Leu Leu Gln 150 . 155 160 Leu Thr Arg Lys Leu Glu Ser Ser Gln Pro Arg Gln Gly Glu Gly Asn 165 . 170 175 Arg Thr Pro Glu Ser Gln Lys Arg Lys Ser Lys Lys Ala Thr Lys Gln 180 185 190 Thr Leu Gln Asp Ser Phe Leu Leu Asp Leu Lys Ser Pro Pro Ser Phe 195 200 205 Pro Val Glu Ile Ser Asp Arg Leu Pro Ala Ala Ser Trp Glu Gly Gln 210 215 220 Glu Ser Cys Trp Asn Lys Gln Thr Ser Lys Ser Glu Gly Thr Gln Pro 230 235 -240 Glu Gly Thr Tyr Gly Glu Gln Leu Val Pro Glu Leu Cys Asn Gln Ser 245 250 255 Glu Ser Ser Gly Glu Asp Phe Phe Leu Lys Ser Arg Leu Gln Glu Gln 260 265· · 270 Asp Val Trp Arg Arg Ser Thr Ser Phe Tyr Thr His Met Cys Asn Pro . 275 280 ´ 285 Trp'Val Ser Leu Leu Gly Ala Val Gly Ser Leu Leu Ile Met Phe Val 290 . 295 300 Ile Gln Trp Val Tyr Thr Leu Val Asn Met Gly Val Ala Ala Ile Val 305 -. 31,0 315 320 Tyr Phe Tyr Ile Gly Arg Ala Ser Pro Gly Leu His Leu Gly Ser Ala 325 330 • 335 Ser Asn Phe Ser Phe Phe Arg Trp Met Arg Ser Leu Leu Leu Pro Ser 340 345 350

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<222> (19)

Cys Arg Ser Leu Gln Ser Pro Gln Glu Gln Ile Ile Leu Ala Pro Ser 355 360 365 Leu Ala Lys Val Asp Met Glu Met Thr Gln Leu Thr Gln Glu Asn Ala 370 375 380 Asp Phe Ala Thr Arg Asp Arg Tyr His His Ser Ser Leu Val Asn Arg 385 390 395 400 . Glu Gln Leu Met Pro His Tyr . 405 <210> 1376 <211> 137 <212> PRT <213> Homo sapiens <400> 1376 Met Leu Ser Gly Arg Leu Val Leu Gly Leu Val Ser Met Ala Gly Arg 1 5. 10 15 Val Cys Leu Cys Gln Gly Ser Ala Gly Ser Gly Ala Ile Gly Pro Val 20 25 30 Glu Ala Ala Ile Arg Thr Lys Leu Glu Glu Ala Leu Ser Pro Glu Val 35 . 40 45 . Leu Glu Leu Arg Asn Glu Ser Gly Gly His Ala Val Pro Pro Gly Ser 50 55 60 Glu Thr His Phe Arg Val Ala Val Val Ser Ser Arg Phe Glu Gly Leu . 70 65 . 75 . 80 Ser Pro Leu Gln Arg His Arg Leu Val His Ala Ala Leu Ala Glu Glu 85 90 95 Leu Gly Gly Pro Val His Ala Leu Ala Ile Gln Ala Arg Thr Pro Ala 100 105 . 110 Gln Trp Arg Glu Asn Ser Gln Leu Asp Thr Ser Pro Pro Cys Leu Gly 115 120 125 Gly Asn Lys Lys Thr Leu Gly Thr Pro 130 135 - . <210> 1377 <211> 143 <212> PRT <213> Homo sapiens <220> <221> SITE

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Leu Glu Leu Arg Asn Glu Ser Gly Gly His Ala Val Pro Pro Gly Ser 55 50 60 Glu Thr His Phe Arg Val Ala Val Val Ser Ser Arg Phe Glu Gly Leu 65 70 75 80 Ser Pro Leu Gln Arg His Arg Leu Val His Ala Ala Leu Ala Glu Glu · 85 90 95 Leu Gly Gly Pro Val His Ala Leu Ala Ile Gln Ala Arg Thr Pro Ala 100 105 110 Gln Trp Arg Glu Asn Ser Gln Leu Asp Thr Ser Pro Pro Cys Leu Gly 120 . 115 125 . Gly Asn Lys Lys Thr Leu Gly Thr Pro 130 135 . • . <210> 1379 <211<u>></u> 82 <212> PRT . <213> Homo sapiens <220> <221> SITE <222> (17) <223> Xaa equals any of the naturally occurring L-amino acids . · <400> 1379 Met Ile Arg Arg Leu Val Phe Ala Ala Phe Pro Arg Leu Phe Pro Val 1 5 10 · 15. Xaa Leu Pro Ser Met Leu Thr His Trp Ala Ser Leu Ala Val Ile Pro. 20 25 30 -Thr Met Thr Ala Thr Ser Val Gly Lys Ala Pro Pro Gly Pro Leu Pro 35 40 45 Asp Ala Ser Pro Ser Leu Arg Leu Pro Ala Arg Arg Arg Pro Asp Pro 50 55 60 Val Gly Ala Cys Arg Gly Val Arg Gly Met Ala Asp Leu Met Val Pro 70 75 80 65 . Leu Pro <210> 1380 <211> 254 <212> PRT <213> Homo sapiens · <220> <221> SITE <222> (176) <223> Xaa equals any of the naturally occurring L-amino acids

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Arg Xaa Glu Gly Trp Xaa Val Ala Thr Gly Gln Val Thr Gly Phe Phe 210 215 220 Asp Ala Pro Arg Gly Ile His Arg Leu Leu Gly Leu Xaa Arg Val Tyr 225 230 235 240 Pro Asp Pro Gly Lys Xaa Arg Lys Arg Gly Asn Leu Pro Leu 245 250 <210> 1381 <211> 74 <212> PRT <213> Homo sapiens <400> 1381 Gly Arg Glu Phe Glu Thr Ser Leu Asp Asn Ile Ala Arg Asp Pro Val .1 ·5 10 · 15 Cys Ile Thr Ser Leu Lys Ile Asp Trp Ala Trp Trp Cys Met Met Val 20 25 . 30 Val Pro Ala Thr Arg Gly Thr Gly Ala Glu Gly Ser Leu Glu Ser Arg 35 40 45 Phe Gln Ala Ala Val Gly Cys Asp Cys Val Thr Ala Leu Gln Pro Gly 50· 55 60 Gln Gln Ser Glu Thr Leu Ser Leu Lys Lys 65 70 <210> 1382 . <211> 273 <212> PRT <213> Homo sapiens <400> 1382 Met Val Ser Ala Leu Cys Gly Leu Cys Leu Leu Gly Ser Asn Asp Ser 1 . 5 . 10 15 Pro Ala Ser Ala Ser Gln Val Ala Gly Thr Thr Gly Leu Ser Lys Ser 20 25 30 , Leu Gly Leu Ile Glu Gly Tyr Gly Gly Arg Gly Lys Gly Gly Leu Pro 35. 40 45 Ala Thr Leu Ser Pro Ala Glu Glu Glu Lys Ala Lys Gly Pro His Glu 55 60 50 . Lys Tyr Gly Tyr Asn Ser Tyr Leu Ser Glu Lys Ile Ser Leu Asp Arg . 70 65 , .75 80 Ser Ile Pro Asp Tyr Arg Pro Thr Lys Cys Lys Glu Leu Lys Tyr Ser . 85 90 95 Lys Asp Leu Pro Gln Ile Ser Ile Ile Phe Ile Phe Val Asn Glu Ala

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				100					105		•			110		
	Leu	Ser	Val 115	Ile	Leu	Arg	Ser	Val 120	His	Ser	Ala	Val	Asn 125	His	Thr	Pro
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	Gly	Leu	Val	Lys	Val 165	Val	Arg	Asn	Gln	Lys 170	Arg	Glu	Gly	Leu	Ile 175	Arg
•	Ala	Arg	Ile	Glu 180	Gļy	Trp	Lys	Val	Ala 185	Thr	Gly	Glņ	Val	Thr 190	Gly	Phe
	Phe	Asp	Ala 195		Val	Glu	Phe	Thr 200	Ala	Gly	Trp	Ala	Glu 205	Pro	Val	Leu
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	Asp	Trp	Trp	Asp 260	Ala	Gly	Asp	Pro	Ser 265	Leu	Pro	Ile	Ser	Asp 270	Arg	Phe
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Asn	Leu	Gln	Asn 100	Gln	Asn	Glu	Phe	Ser 105	Phe	Thr	Ala	Ile	Leu 110	Thr	Ala
Leu	Glu	Phe 115		Ser	Arg	Val	Thr 120		Ser	Ile	Leu	Gln 125		Met	Ala
His	Asn 130	Ly's	Val	Met	Val	Glu 135		Val	Cys	Leu	His 140		Ile	Ser	Leu
Met 145	Gļu	Ala	Leu	Gln	Glu 150	Cys	Asn	Ser	Thr	Ile 155	Phe	Val	Lys	Leu	Ile 160
Pro	Met.	Trp	Leu	Pro 165	Met	Ile	Gln	Ser	Asn 170	Ile	Lys	His	Leu	Ser 175	Ala
Gly	Leu	Gln	Leu 180	Arg	Leu	Gln	Ala	Ile 185	Gln	Asn	His	Val	Asn 190	His	His
Ser	Leu	Arg 195	Thr	Leu	Pro	Gly	Ser 200	Gly	Gln	Ser	Ser	Ala 205	Gly	Leu	Ala
Ala	Leu 210	Arg	Lys	Trp	Leu	Gln 215	Cys	Thr	Gln	Phe	Lys 220	Met	Ala	Gln	Val
Glu 225	Ile	Gln -	Ser	Ser	Glu 230	Ala	Ala	Ser	Gln	Phe <sup>-</sup> 235	Tyr	Pro	Leu		
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Arg	Gļy	Asn	His 20	Arg	Asp	Asn	Lys	Ala 25	Val ;	Ile	Arg	Tyr	Leu 30	Pro	Trp
Leu	Tyr	His 35	Pro	Pro	Ser	Ala	Met 40	Gln	Gln	Gly	Pro	Lys 45	Glu	Phe	Ile
Glu	Cys 50	Val	Ser	His	Ile	Arg 55	Leu	Leu	Ser	Trp	Leu 60	Leu	Leu	Gly	Ser
Leu 65	Thr	His	Asn	Ala`	Val 70	Cys	Pro	Asn	Ala	Ser 75	Ser	Pro	Cys	Leu	Pro 80
				Ala 85					90					95	
			100	Pro			••	105		•			110		_
Ser		Phe 115	His	Ala	Phe	Ile	Phe 120	Ala	Gln	Leu	Trp	Thr 125	Val	Tyr	Cys

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Glu Gln Ser Ala Val Ala Thr Asn Leu Gln Asn Gln Asn Glu Phe Ser 130 . 135 140 Phe Thr Ala Ile Leu Thr Ala Leu Glu Phe Trp Ser Arg Val Thr Pro 145 150 155 160 Ser Ile Leu Gln Leu Met Ala His Asn Lys Val Met Val Glu Met Val 165 170 175 Cys Leu His Val Ile Ser Leu Met Glu Ala Leu Gln Glu Cys Asn Ser 180 185 190 Thr Ile Phe Val Lys Leu Ile Pro Met Trp Leu Pro Met Ile Gln Ser 195 200 . 205 Asn Ile Lys His Leu Ser Ala Gly Leu Gln Phe Ala Ser Arg Leu Phe 210 215 220 Arg Thr Thr 225 <210> 1385 <211> 85 <212> PRT <213> Homo sapiens <400> 1385 Met Ser Thr Cys Cys Thr Ser Ala Leu Gln Tyr Leu Leu Ala Leu Phe 1 · 5 . 10 15 Pro Leu Pro Ala Pro Asn Cys Val Ser Tyr Arg Ser Gln Gly Ser Ser 20 25 30 Cys Tyr Leu Leu Gln Ile Gln Lys Pro Arg Leu Arg Glu Glu Pro 35 40 45 Glu Trp Pro Gln Pro Gln Ser Lys Ser Met Arg Gly Ser Met Lys Leu 50 55 , 60 . Gly Phe Phe Pro His Cys Thr Arg Leu Leu Pro Ser Trp Gly Gly Gly 65 70 75 80 Gly Arg Cys Ser Gly 85 <210> 1386 <211> 110 ۰. <212> PRT <213> Homo sapiens <220> <221> SITE <222> (20) <223> Xaa equals any of the naturally occurring L-amino acids . . . . . <400> 1386 828

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Ile	Leu	Ser 35	Ċys	Leu	Leu	Leu	Ala 40	Glu	Pro	Pro	Leu	Lys 45	Phe	Leu	Ala	
Asn	His 50	Thr	Asn	Ile	Leu	Leu 55	Ala	Ser	Ser	Ile	Ттр 60	Tyr	Ile	Thr	Phe	
Phe 65	Cys	Pro	His	Asp	Leu 70	Val	Ser	Gln	Gly	Tyr 75	Ser	Tyr	Leu	Pro	Val 80	
Gln	Leu	Leu	Ala	Ser 85	Gly	Met	Lys	Glu	Val 90	Thr	Arg	Thr	Trp	Lys 95	Ile	
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Thr	Asn 130	Phe	Glu	Arg	Leu	Val 135	Lys	Gly	Asp	Trp	Lys 140	Pro	Glu	Gly	Asp	
Glu 145		Leu	Lys	Met	Ser 150	'Tyr	Íro	Ala	Lys	Val 155	Thr	Leu	Leu	Gly	Ser 160	
Val	Ile	Phe .	Thr	Phe 165	Gln	His	Thr	Gln	His 170	Leu	Ala	Ile	Ser	Lys 175	His	
Àsn	Leu	Met	Phe 180		Tyr	Thr	Ile	Phe 185	Ile	Val	Ala	Thr	Lys 190	Ile	Thr	
Met	Met	Thr 195	Thr	Gln	Thr	Ser	Thr 200	Met	Thr	Phe	Ala	Pro 205	Phe	Glu	Asp	•
Thr	Leu 210	Ser	Trp	Met	Leu	Phe 215	Gly	Trp	Gln	Gln	Pro 220	Phe	Ser	Ser	Cys	
Glu 225	Lys	Lys :	Ser	Glu	Ala 230	Lys	Ser	Pro	Ser	Asn 235	Gly	Val	Gly	Ser	Leu 240	
Ala	Ser	Lys	Pro	Val 245	Asp	Val	Ala	Ser	Asp 250	Asn	Val	Lys	Lys	Lys 255	His	
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Phe	Phe	Leu 、	Ser 20	His	Lys	Asn	Thr	Phe 25	Val	Leu	Ile	Val	Gly 30	Glu	Ile	

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Phe Ser Ala Phe Cys Met Phe Phe Leu Ile Phe Val Gly Leu Asn Ile 35 40 45 Leu Val Val Ile Thr Val Ile Ile Gln Gln Lys Ala Tyr Pro Phe Lys 50 55 60 Asn Phe Ser Thr Met Ser Phe Phe 65 70 <210> 1390 <211> 261 <212> PRT <213> Homo sapiens <400> 1390 Met Ala Val Lys Arg Gln Pro Gly Ala Ala Ala Leu Ala Trp Lys Asn 5 · 10 1 15 Pro Ile Ser Ser Trp Phe Thr Ala Met Leu His Cys Phe Gly Gly Gly 20 25 30 Ile Leu Ser Cys Leu Leu Leu Ala Glu Pro Pro Leu Lys Phe Leu Ala 35 . 40 45 Asn His Thr Asn Ile Leu Leu Ala Ser Ser Ile Trp Tyr Ile Thr Phe 50 55 60 . Phe Cys Pro His Asp Leu Val Ser Gln Gly Tyr Ser Tyr Leu Pro Val . 70 65 75 80 • Gln Leu Leu Ala Ser Gly Met Lys Glu Val Thr Arg Thr Trp Lys Ile 85 90 95 Val Gly Gly Val Thr His Ala Asn Ser Tyr Tyr Lys Asn Gly Trp Ile 100 105 110 Val Met Ile Ala Ile Gly Trp Ala Arg Gly Ala Gly Gly Thr Ile Ile 115 . 120 125 · .• Thr Asn Phe Glu Arg Leu Val Lys Gly Asp Trp Lys Pro Glu Gly Asp 130 . 135 . 140 ' Glu Trp Leu Lys Met Ser Tyr Pro Ala Lys Val Thr Leu Leu Gly Ser 145 150 . -155 . 160 Val Ile Phe Thr Phe Gln His Thr Gln His Leu Ala Ile Ser Lys His 175 165 170 Asn Leu Met Phe Leu Tyr Thr Ile Phe Ile Val Ala Thr Lys Ile Thr 180 185 190 Met Met Thr Thr Gln Thr Ser Thr Met Thr Phe Ala Pro Phe Glu Asp 195 200 . 205 Thr Leu Ser Trp Met Leu Phe Gly Trp Gln Gln Pro Phe Ser Ser Cys 210 215 220 Glu Lys Lys Ser Glu Ala Lys Ser Pro Ser Asn Gly Val Gly Ser Leu

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225				• :	230					235					240	
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Leu	Ser	Leu	Ġln 20	Val	Cys	Val	Phe	Val 25	Gly	Ser	Ser	Gln	Pro 30	Leu	Leu	
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Arg	His 50	Gln	Pro	Phe	Trp	Asp 55	Cys	Pro	Thr	Gly	Pro 60	Ser	Arg	Glu	Glu	
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Ser	Phe	Gly	Trp	Gln 85	Val	Ala	Leu	Arg	Pro 90	Ser	Glu	Lys	Ser	Pro 95	Cys	
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Leu	Ser	Leu	Gln 20	Val	Cys	Val	Phe	Val 25	Gly	Ser	Ser	Gln	Pro 30	Leu	Leu ·	; ·
Leu	Gln	Cys 35	Val	Ser	Gly	Pro	Ala 40	Pro	Phe	Leu	Leu	Ser 45	Leu	Gly	Val	
Arg	His 50		Pro	Phe	Trp	Asp 55	Cys	Pro	Thr	Gly	Pro .60	Ser	Arg	Glu	Glu	
Thr 65	Arg	Leu	Asn	Pro	Arg 70		Leu	Thr	Arg	Pro 75	Arg	Gln	Thr	Cys	Trp 80	

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Thr Pro Arg Gly Asp Leu Cys Lys Glu His Leu Ser

Ile Ile Ser His Ala Trp Leu Gly Gly Ser His Ala His Gly Ala Ser 85 90 95 Leu Ile Ala Ser Thr Ala Val . 100 . <210> 1397 <211> 125 <212> PRT · <213> Homo sapiens <400> 1397 Met Cys Val Trp Phe Cys Leu Phe Ala Cys Leu Phe Ala Cys Leu Phe 1 . 5 10 .15 Phe Glu Thr Glu Ser His Ser Val Ala Gln Ala Gly Val Gln Trp Leu 20 25 30 Asp Leu Ser Ser Leu Gln Gln Pro Pro Pro Gly Phe Lys Cys Phe . 35 . 40 45 Ser Cys Leu Cys Leu Leu Ser Ser Trp Asp Tyr Arg Arg Ala Cys His · 55 50 60 His Thr Arg Ile Ile Phe Val Phé Leu Val Glu Met Gly Phe His His 65 70 75 -80 Val Asp Gln Ala Asp Leu Glu Leu Leu Thr Ser Ser Asp Pro Pro Ala 85 ' • 90 . . , **95** Leu Ala Ser Arg Ser Ala Gly Ile Thr Gly Val Ser His His Thr Pro 100 105 110 Pro Ala Cys Leu Val Phe Lys Phe Leu Phe Leu Gly Ser 115 120 125 . . <210> 1398 <211> 112 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (91) <223> Xaa equals any of the naturally occurring L-amino acids <220> · . · · ' · <221> SITE · · · · · <222> (106) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1398 Ala Pro Val Leu Leu Pro Ser Ser Cys Trp Gln Phe Trp Val Leu 1. . 5 10 15 .

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Asr	Asp 50	Pro	Leu	Ala	Ser	Ala 55	Ser	Gln	Leu	Ala	Gly 60.		Thr	Gly	Ala	
His 65	His	His	Gly	Gln	Leu 70	Ile	Phe	Val	Phe	Leu 75	Val	Glu	Met	Gly	Phe. 80	
His	His	Ile	Ala	Gln 85	Ala	Gly	Leu	Lys	Leu 90	Xaa	Thr	Ser	Ser	Asp 95	Leu	
Leu	Thr	Ser	Ala 100	Phe	Gln	Ser	Ala	Gly 105	Xaa	Ile	Tyr	Ile	Leu 110	Asn	Lys	
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Asp		Ser 35	Ser	Leu	Gln	Gln	Pro 40	Pro	Pro	Pro	Gly	Phe 45	'Lys	Cys	Phe	
Ser	Cys 50	Leu	Суз	Ļeu	Leu	Ser 55	Ser	Trp	Asp	Tyr	Arg 60	Arg	Ala	Суз ,	His	•
His . 65	Thr	Arg	Ile	Ile	Phe 70	Val	Phe	Leu	Val	Glu 75	Met	Gly	Phe	His	His 80	
Val	Asp	Gl'n	Ala	Asp 85	Leu	Glu	Leu	Leu	Thr 90	Ser	Ser	Asp	Pro	Pro 95	Ala	
Leu	Ala	Ser	Arg 100		Ala	Gly	Ile ,	Thr 105	Gly	Val	Ser	His	His 110	Thr	.Pro	
Pro	Ala	Cys 115	Leu	Phe	Phe	Lys	Phe 120	Leu	Phe	Leu <sub>.</sub>	Gly	Ser 125	·	•	-	
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• <400> 1400 - X Met Glu Leu Gly Cys Trp Thr His Trp Gly Ser Leu Phe Phe Ser Ser Phe Ser Ser Arg Pro Cys Gin Glu Ser Thr Gln Ser Heu Met Lys Pro 20 25 30 Ala Leu Glu Gln Ser Gly Ile Ser Cys Val Gly Ser Ala Val Asn Met 35 . 40 45 Ile Arg Leu Ser Ala Ser Ala Pro Glu Arg Gly Lys Ser Trp Val Ile 50 55 60 Pro Ser Leu Ala Ala Gly Met Arg Arg Met Ser Val Thr Pro Ala 65 70 75 <210> 1401 <211> 455 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (17) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE • . a ar A <222> (103) <223> Xaa equals any of the naturally occurring L-amino acids · · · · • <220> <221> SITE . -<222> (178) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1401 Xaa Thr Gly Gln Arg Cys Glu Asn Leu Leu Glu Glu Arg Asn Cys Ser 1 . 10 15 Xaa Pro Gly Gly Pro Val Asn Gly Tyr Gln Lys Ile Thr Gly Gly Pro 20 25 Gly Leu Ile Asn Gly Arg His Ala Lys Ile Gly Thr Val Val Ser Phe 35 40 45 Phe Cys Asn Asn Ser Tyr Val Leu Ser Gly Asn Glu Lys Arg Thr Cys 50 55 60 • Gln Gln Asn Gly Glu Trp Ser Gly Lys Gln Pro Ile Cys Ile Lys Ala 65 70 75 . 80 Cys Arg Glu Pro Lys Ile Ser Asp Leu Val Arg Arg Arg Val Leu Pro

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	Met	Gln	Val	Gln 100	Ser	Arg	Xaa	Thr	Pro 105	Leu	His	Gln	Leu	Tyr 110	Ser	Ala				
	Ala	Phe	Ser 115	Lys	Gln	Lys	Leu	Gln 120	Ser	Ala	Pro	Thr	Lys 125	Lys	Pro	Ala				
	Leu	Pro 130	Phe	Gly	Asp	Leu	Pro 135	Met	Gly	Tyr	Gln	His 140	Leu	His	Thr	Gln				
	Leu 145	Gln	Tyr	Glu	Cys	Ile 150	Ser	Pro	Phe	Tyr	Arg 155	Arg	Leu	Gly	Ser	Ser 160				
	Arg	Arg	Thr	Суз	Leu 165	Arg	Thr	Gly	Lys	Trp 170	Ser	Gly	Arg	Ala	Pro 175	Ser				
	Cys	Xaa	Pro	Ile 180	Cys 、	Gly	Lys	Ile	Ģlu 185	Asn	Ile	Thr	Ala	Pro 190	Lys	Thr		•		'a
	Gln	Gly	Leu 195	Arg	Trp	Pro	Trp .·	Gln 200	Ala	Ala	Ile	Tyr	Arg 205		Thr	Ser				,
	Gly	Val 210	His	Asp	Gly	Ser	Leu 215	His	Lys	Gly	Ala	Trp 220	Phe	Leu	Val	Cys				
	Ser 225	Gly	Ala	Leu	-Val	Asn 230	Glu	Arg	Thr	Val	Val 235	Val	Ala	Ala	His	Cys 240	•			
					245	Ļys				250					255	-				•
	Val	Val	Leu	Gly 260	Lys	Phe	Tyr	Arg	Asp 265	Asp	Asp	Arg	Asp	Glu 270	Lys	Thr				
			275			Ile.		280				•	285			-				•
	Pro	Ile 290	Leu	Leu	Asp	Ala	Asp 295	Ile	Ala	Ile	Leu	Lys 300	Leu	Leu	Asp	Lys			·	
• •	305					Arg 310					315		•			320		•		
					325	Phe				330	•				335					
			•	340		Val			345 <sup>,</sup>					350						
			355			Ser		360					365	•				•		
		370				•	375					380		•						
	385					Thr 390					395			•		400				
	Gly	Gly	Ile	Ala	Ala	Val	Ser	Phe	Pro	Gly	Arg	Ala	Ser	Pro	Glu	Pro		. ·		• •

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410 405 415 Arg Trp His Leu Met Gly Leu Val Ser Trp Ser Tyr Asp Lys Thr Cys 420 ( 425 430 · Ser His Arg Leu Ser Thr Ala Phe Thr Lys Val Leu Pro Phe Lys Asp 435 440 445 . Trp Ile Glu Arg Asn Met Lys 450 455 <210> 1402 <211> 323 <212> PRT . <213> Homo sapiens . <220> <221> SITE <222> (283) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (296) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (298) <223> Xaa equals any of the naturally occurring L-amino acids . <400> 1402 Met Glu Leu Gly Cys Trp Thr Gln Leu Gly Leu Thr Phe Leu Gln Leu 1 5 10 15 Leu Leu Ile Ser Ser Leu Pro Arg Glu Tyr Thr Val Ile Asn Glu Ala 20 25 .30 Cys Pro Gly Ala Glu Trp Asn Ile Met Cys Arg Glu Cys Cys Glu Tyr 35 40 45 Asp Gln Ile Glu Cys Val Cys Pro Gly Lys Arg Glu Val Val Gly Tyr 50 55 · 60 Thr Ile Pro Cys Cys Arg Asn Glu Glu Asn Glu Cys Asp Ser Cys Leu . 65 70 75 . 80 Ile His Pro Gly Cys Thr Ile Phe Glu Asn Cys Lys Ser Cys Arg Asn 85 95 . 90 Gly Ser Trp Gly Gly Thr Leu Asp Asp Phe Tyr Val Lys Gly Phe Tyr 100 105 110 Cys Ala Glu Cys Arg Ala Gly Trp Tyr Gly Gly Asp Cys Met Arg Cys 115 120 125 Gly Gln Val Leu Arg Ala Pro Lys Gly Gln Ile Leu Leu Glu Ser Tyr 130 . 135 . 140 ..

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•	Pro 145		Asn	Ala	His	Cys 150	Glu	Trp	Thr	Ile	His 155	Ala	Lys	Pro	Gly	Phe 160
	Val	Ile	Gln	Leu	Arg 165	Phe	Val	Met	Leu	Ser 170	Leu	Glu	Phe	Asp	Tyr 175	Met
	Cys	Gln	Tyr	Aśp 180	Tyr	Val	Glu	Vạl	<u>Arg</u> 185	Asp	Gly	Asp	Asn	Arg 190	Asp	Gly
	Gln	Ile	Ile 195	Lys	Arg	Val	Cys	Gly 200	Asn	Glu	Arg	Pro	Ala 205	Pro	Ile	Gln ·
	Ser	Ile 210	Gly	Ser	Ser	Leu	His 215	Val	Leu	Phe	His	Ser 220	Asp	Gly	Ser	Lys
	Asn 225	Phe	Asp	Gly	Phe	His 230	Ala	Ile	Tyr	Glu	Glu 235	Ile	Thr	Ala	Cys	Ser 240
	Ser	Ser	Pro	Cys	Phe 245	His	Asp	Gly	Thr	Cys 250	Val	Leu	Asp	Lys	Ala 255	Gly
	Ser	Tyr	Lys	Cys 260	Ala	Cys	Leu	Ala	Gly 265	Tyr	Thr	Gly	Gln	Arg 270	Cys	Glu
	Asn	Leu	Leu 275	Glu	Ala	Gļy	Lys	Ser 280	Lys	Ile	Xaa	Ala	Ser 285	Glu	Asp	Ser
	Leu	Ser 290	Val	Leu	Glu	Glu	Arg 295	Xaa	Cys ,	Xaa	Asp	Pro 300	Glý	Gly	Pro	Val
	Asn 305	Gİy	Tyr	Gln	Lys	Ile 310	Thr	Gly	Gly	Pro	Gly 315	Leų	Ile	Asn	Gly	Arg 320
	His	Ala	Lys													
					•											
		)> 14 .> 80					•	·			,	•				
	<212	l> PF	۲۶	sapie	ens		•									
	<400	)> 14	103		•				•							
·.	Met 1	Ala	Arg .	Ser	Trp. 5	Leu	Thr	Ala	Thr	Ser 10	Ala	Ser	Arg	Val	Gln 15	Ala
	Ile	Leu	Leu ,	Leu 20	Gly	Leu	Gln	His	Met 25	Pro	Pro	Cys	Pro	Asp 30	Tyr	Phe
	Phe	Val	Phe 35	Val	Val	Glu '	Thr	Gly 40	Phe	His	His	Val	Ser 45	Gln	Ala	Gly .
	Leu	Glu 50	Leu	Leu	Thr	Ser	Gly 55	Asp	Pro	Pro	Ala	Ser 60	Ala	Ser	His	Thr
î	Ala 65	Gly	Ile	Thr	Gly	Met 70	Ser	His	Arg	Ser	Trp 75	Pro	Leu	Phe	Leu	Phe . 80

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<210> 1404 <211> 121 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (114) . <223> Xaa equals any of the naturally occurring L-amino acids <400> 1404 Lys Leu Arg Leu Arg Glu Val Lys Ser Ile Ala Gln Gly His Val Ala 1 5 10 15 Arg Ile Trp Gln Ser His Asp Ser Asp Pro Gly Leu Leu Ile Leu Ile 20 25 30 Pro Val Ser Phe Leu Ala Tyr His Val Ala Ser Lys Asp Cys Ser Ser 35 40 45 ۰. Leu Phe Thr Arg Lys Leu Phe Leu Pro Asn Leu His Leu His Leu Thr · 50 55 60 Pro Ser Phe Leu Lys His Tyr Val Cys Val Phe Ile Ser Ile Ile Phe 65 Ile Val Phe Gly Ile His Val Leu Val Cys Val Trp Lys Lys Asn Leu 85 90 95 Phe Tyr Gln Leu Ala Leu Gly Pro Thr Trp Lys Lys Lys Ser Leu Asn 100 105 110 · · Val Xaa Ala Met Tyr Ser Leu Lys Met 115 120 <210> 1405 ... -<211> 80 <212> PRT <213> Homo sapiens <400> 1405 · Met Ala Arg Ser Trp Leu Thr Ala Thr Ser Ala Ser Arg Val Gln Ala 10 15 1 5. Ile Leu Leu Cly Leu Gln His Met Pro Pro Cys Pro Asp Tyr Phe 20 25 30 Phe Val Phe Val Val Glu Thr Gly Phe His His Val Ser Gln Ala Gly 3.5 40 45 Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Ser Ala Ser His Thr 50 55 · 60

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Ala Gly Ile Thr Gly Met Ser His Arg Ser Trp Pro Leu Phe Leu Phe 65 70 75 80

<210> 1406 <211> 83 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (82) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1406 Ile Trp Met His Phe Ile Ser Phe Leu Tyr Pro Ile Ala Leu Ala Thr 1 5 .10 •. 15 Thr Ser Ser Thr Val Leu Asn Arg Ser Gly Glu Cys Gly His Pro Cys 20 25 . 30 Leu Val Pro Val Leu Arg Glu Asn Ala Phe Ser Leu Ser Pro Phe Gly 35 . 40 45 · Met Met Phe Ala Val Gly Leu Ser Tyr Met Ala Phe Phe Thr.Leu Arg 50 55 60 . Tyr Val Pro Ser Val Pro Ile Leu Leu Arg Val Phe Ile Ile Gln Glu 65 70 75 80 Cys Xaa Phe . <210> 1407 <211> 94 <212> PRT <213> Homo sapiens <400> 1407 Met His Phe Ile Ser Phe Leu Tyr Pro Ile Ala Leu Ala Thr Thr Ser 1 5 10 15 Ser Thr Val Leu Asn Arg Ser Gly Glu Cys Gly His Pro Cys Leu Val 20 25 30 , ( Pro Val Leu Arg Glu Asn Ala Phe Ser Leu Ser Pro Phe Gly Met Met 35 . 40 45 Phe Ala Val Gly Leu Ser Tyr Met Ala Phe Phe Thr Leu Arg Tyr Val 50 - 55 60 · Pro Ser Val Pro Ile Leu Leu Arg Val Phe Ile Ile Gln Glu Cys Trp 65 . 70 75 80

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Ile Leu Ser Asn Ala Phe Ser Ala Ser Gly Glu Met Ile Ile 85 90 <210> 1408 <211> 94 <212> PRT <213> Homo sapiens <400> 1408 Met His Phe Ile Ser Phe Leu Tyr Pro Ile Ala Leu Ala Thr Thr Ser 1 5 • . Ser Thr Val Leu Asn Arg Ser Gly Glu Cys Gly His Pro Cys Leu Val 20. 25 30 . Pro Val Leu Arg Glu Asn Ala Phe Ser Leu Ser Pro Phe Gly Met Met 40 . 45 35 Phe Ala Val Gly Leu Ser Tyr Met Ala Phe Phe Thr Leu Arg Tyr Val 50 55 60 Pro Ser Val Pro Ile Leu Leu Arg Val Phe Ile Ile Gln Glu Cys Trp 65 70 75 . . 80 Ile Leu Ser Asn Ala Phe Ser Ala Ser Gly Glu Met Ile Ile -85 90 . . 1 <210> 1409 <211> 95 <212> PRT <213> Homo sapiens <400> 1409 . Met Ile Leu Ile Arg Lys Leu Phe Leu Arg Arg Cys His Trp Gly Gly 1 5 10 15 Trp Leu Leu Pro Pro Ala Arg Ala Ser Cys Ser Gly Lys His Ser Leu 20 - 25 30 Ser His Ser Cys Arg Gly Pro Arg Val Gln Arg Pro Pro His Pro Arg 35 40 45 Phe Trp Ala Gly Thr Leu Ala Pro Gly Pro Cys Pro Gly Leu Trp Cys . 50 55 60 . . Leu Pro Gly Leu Val Gln Val Asp Val Leu Ala Ala Gly Arg Cys Asp 65 70 . 75 80 His Leu Ser Cys Leu Pro Pro Leu Cys Pro Gln Ala Phe Leu Leu 85 . <210> 1410

<211> 92

<212> PRT

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P	he	Trp	Arg 115	Ser	Lys	Pro	Lys	Cys 120	Val	His	Arg	Leu	Thr 125	Glu	Ser	Met
T		His 130	Ţŗp	Gly	Gln	Glu	Leu 135	Cys	Phe	Val	Val	Tyr 140	Pro	Gln	Asp	Aļa
	ro 45	Glu	Glu	Glu	Glu .'	Asn 150	Ala	Pro	Ala	His	Pro 155	Pro	Cys	Cys	Leu	Pro 160
G	ln	Thr	Ser	Pro	Arg 165	Ser	His	Asn	Glu	Ile 170	Phe	Val	Glu	Thr	Glu 175	Ala
· v	al	Val	Ser	Val 180	Tyr	Met	Leu		Ile 185	Glu	Glu	Val	Phe	Trp 190	Gln	Lys
S	ler	Phe	Val 195	Leu	Phe	Phe	Ser	Gly 200	Lys	Lys	Arg	Lys	Lys 205	Ile	Arg	Leu
S.		Glu 210	Ala	Cys	Phe	Lys	Glu 215	Ala	Leu	Lys	Cys ~	Gly 220	Leu	Gly	Phe	Leu
	er 25										·					
<	210															
< <	211 212	> .17 .> PF		sapie	ens											
< < < <	211 212 213	> .17 > PF > Ho > 14	er Mos 12			His	суз	Thr	Pro	Ile 10	Pro	Ala	Leu	Leu	Val 15	Cys
< < < M	211 212 213 400 let 1	> .17 > PF > Ho	RT MO 5 112 His	Val	Arg 5	His Val				10				•	15	-
< < < M	211 212 213 400 let 1 Sys	> 17 > PF > Hc : : : : : : : : : : : : : : : : : : :	RT DMO 5 112 His Ala	Val Thr 20	Arg 5 Ala		Ile	Met	Leu 25	10 Val	Gly	Asp	Ţhr	Tyr 30	15 Thr	Leu
< < < M C	211 212 213 400 Met 1 Sys	> 17 > PF > Ho > 14 Ile Gly Asn	Ala Tyr 35	Val Thr 20 Val	Arg 5 Ala Ser	Val	Ile Ile	Met Asn 40 Trp	Leu 25 Tyr	10 Val Leu Arg	Gly Cys Pro	Asp Tyr	Thr Gly 45 Leu	Tyr 30 Val	15 Thr Thr	Leu Ile
< < M C I L	211 212 213 4000 Met 1 2ys 1e	> 17 > PF > Ho > 14 Ile Gly Asn Gly 50	RT pmo s l12 His Ala Tyr 35 Leu	Val Thr 20 Val Leu	Arg 5 Ala Ser Leu	Val Phe	Ile Ile Arg 55	Met Asn 40 Trp	Leu 25 Tyr Arg	10 Val Leu Arg	Gly Cys Pro	Asp Tyr Ala 60	Thr Gly 45 Leu	Tyr 30 Val His	15 Thr Thr Arg	Leu Ile Pro
< < M C I I I	211 212 213 400 et 1 ys 1e 65	> 17 > PF > Hc > 14 Ile Gly Asn Gly 50 Lys	er omo s His Ala Tyr 35 Leu Val	Val Thr 20 Val Leu Asn	Arg 5 Ala Ser Leu Leu	Val Phe Leu Leu	Ile Ile Arg 55 Ile	Met Asn 40 Trp Pro	Leu 25 Tyr Arg Val	10 Val Leu Arg Ala	Gly Cys Pro Tyr 75	Asp Tyr Ala 60 Leu	Thr Gly 45 Leu Val	Tyr 30 Val His Phe	15 Thr Thr Arg Trp	Leu Ile Pro Ala 80
< < M C I I P P	211 212 213 400 et 1 2ys 1e 65 Phe	> 17 > PF > Hc > 14 Ile Gly Sly 50 Lys Leu	eT pmo s l12 His Ala Tyr 35 Leu Val Leu	Val Thr 20 Val Leu Asn Val	Arg 5 Ala Ser Leu Leu Phe 85	Val Phe Leu Leu 70	Ile Ile Arg 55 Ile Phe	Met Asn 40 Trp Pro : Ile	Leu 25 Tyr Arg Val Ser	10 Val Leu Arg Ala Glu 90	Gly Cys Pro Tyr 75 Pro	Asp Tyr Ala 60 Leu Met	Thr Gly 45 Leu Val	Tyr 30 Val His Phe Cys	15 Thr Thr Arg Trp Gly 95	Leu Ile Pro Ala 80 Val
< < M C I I I G	211 212 213 400 et 1 ys 1e 65 Phe	> 17 > PF > Ho > 14 Ile Gly Asn Gly 50 Lys Leu Val	Tyr Ala Tyr 35 Leu Val Leu	Val Thr 20 Val Leu Asn Val Ile 100	Arg 5 Ala Ser Leu Leu Phe 85 Ile	Val Phe Leu 70 Ser	Ile Ile Arg 55 Ile Phe Thr	Met Asn 40 Trp Pro : Ile Gly	Leu 25 Tyr Arg Val Ser Val 105	10 Val Leu Arg Ala Glu 90 Pro	Gly Cys Pro Tyr 75 Pro Ile	Asp Tyr Ala 60 Leu Met Phe	Thr Gly 45 Leu Val Val Phe	Tyr 30 Val His Phe Cys Leu 110	15 Thr Thr Arg Trp Gly 95 Gly	Leu Ile Pro Ala 80 Val
< < M C I I I G P P	211 212 213 400 et 1 ys 1e 65 Phe 65 Phe	> 17 > PF > Ho > 14 Ile Gly Asn Gly 50 Lys Leu Val	Tomo somo somo somo somo somo somo somo	Val Thr 20 Val Leu Asn Val Ile 100 Ser	Arg 5 Ala Ser Leu Leu Phe 85 Ile Lys	Val Phe Leu 70 Ser Leu	Ile Ile Arg 55 Ile Phe Thr Lys	Met Asn 40 Trp Pro : Ile Gly Cys 120	Leu 25 Tyr Arg Val Ser Val 105 Val	10 Val Leu Arg Ala Glu 90 Pro His	Gly Cys Pro Tyr 75 Pro Ile Arg	Asp Tyr Ala 60 Leu Phe Leu	Thr Gly 45 Leu Val Val Phe Thr 125	Tyr 30 Val His  Phe Cys Leu 110 Glu	15 Thr Thr Arg Trp Gly 95 Gly Ser	Leu Ile Pro Ala 80 Val Val Met

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150 ' 145 155 160 His Arg Gln Ala Leu Glu Ala Thr Met Arg Phe Leu 165 170 <210> 1413 <211> 225 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (66) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (101) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1413 Met Ile His Val Arg His Cys Thr Pro Ile Pro Ala Leu Leu Val Cys 1 5 10 (15 Cys Gly Ala Thr Ala Val Ile Met Leu Val Gly Asp Thr Tyr Thr Leu 20 25 30 Ile Asn Tyr Val Ser Phe Ile Asn Tyr Leu Cys Tyr Gly Val Thr Ile - 35 - -40 45 Leu Gly Leu Leu Leu Arg Trp Arg Arg Pro Ala Leu His Arg Pro 55 50 60 Ile Xaa Val Asn Leu Leu Ile Pro Val Ala Tyr Leu Val Phe Trp Ala . 70 75 65 80 Phe Leu Leu Val Phe Ser Phe Ile Ser Glu Pro Met Val Cys Gly Val 85 90 95 Gly Val Ile Ile Xaa Leu Thr Gly Val Pro Ile Phe Phe Leu Gly Val . 105 - 100 110 י Phe Trp Arg Ser Lys Pro Lys Cys Val His Arg Leu Thr Glu Ser Met 115 120 125 . . Thr His Trp Gly Gln Glu Leu Cys Phe Val Val Tyr Pro Gln Asp Ala 130 . · 140 135 Pro Glu Glu Glu Asn Ala Pro Ala His Pro Pro Cys Cys Leu Pro 145 150 155 · 160 Gln Thr Ser Pro Arg Ser His Asn Glu Ile Phe Val Glu Thr Glu Ala 165 170 ·175 Val Val Ser Val Tyr Met Leu Phe Ile Glu Glu Val Phe Trp Gln Lys 185 180 190 Ser Phe Val Leu Phe Phe Ser Gly Lys Lys Arg Lys Lys Ile Arg Leu

195 - 200 205 Ser Glu Ala Cys Phe Lys Glu Ala Leu Lys Cys Gly Leu Gly Phe Leu 215 210 220 Ser 225 <210> 1414 <211> 67 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1414 Lys Asp Lys Cys Ile Leu Leu Lys Arg Gln Ser Xaa Thr His Glu Glu 5 10 1 15 Gln Cys Lys Leu Lys Pro Asn Gln Arg Leu Gly Val Ala Ala Met Pro 20 25 30 Val Ile Pro Ala Leu Trp Glu Ala Glu Val Gly Arg Leu Leu Glu Ile 35 . 40 45 Arg Ser Leu Ser Leu Gly Asn Ile Val Lys Pro Cys Leu Tyr Lys Lys . . 50 55 60 Tyr Lys Asn 65 . . <210> 1415 <211> 587 <212> PRT <213> Homo sapiens <400> 1415 Met Arg Pro Arg Gly Leu Pro Pro Leu Leu Val Val Leu Leu Gly Cys 5 1 10 15 Trp Ala Ser Val Ser Ala Gln Thr Asp Ala Thr Pro Ala Val Thr Thr 20 25 . 30 Glu Gly Leu Asn Ser Thr Glu Ala Ala Leu Ala Thr Phe Gly Thr Phe 35 40 · 45 Pro Ser Thr Arg Pro Pro Gly Thr Pro Arg Ala Pro Gly Pro Ser Ser 50 55 60 . . Gly Pro Arg Pro Thr Pro Val Thr Asp Val Ala Val Leu Cys Val Cys 70 65 75 80 . . Asp Leu Ser Pro Ala Gln Cys Asp Ile Asn Cys Cys Cys Asp Pro Asp

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Cys Ser Ser Val Asp Phe Ser Val Phe Ser Ala Cys Ser Val Pro Val 110 105 100 Val Thr Gly Asp Ser Gln Phe Cys Ser Gln Lys Ala Val Ile Tyr Ser 125 . 120 115 Leu Asn Phe Thr Ala Asn Pro Pro Gln Arg Val Phe Glu Leu Val Asp 140 135 . 130 Gln Ile Asn Pro Ser Ile Phe Cys Ile His Ile Thr Asn Tyr Lys Pro 155 160 150 145 Ala Leu Ser Phe Ile Asn Pro Glu Val Pro Asp Glu Asn Asn Phe Asp 170 175 165 Thr Leu Met Lys Thr Ser Asp Gly Phe Thr Leu Asn Ala Glu Ser Tyr 190 185 . 180 Val Ser Phe Thr Thr Lys Leu Asp Ile Pro Thr Ala Ala Lys Tyr Glu 205 , **195** 200 Tyr Gly Val Pro Leu Gln Thr Ser Asp Ser Phe Leu Arg Phe Pro Ser 215 . 220 210 Ser Leu Thr Ser Ser Leu Cys Thr Asp Asn Asn Pro Ala Ala Phe Leu 240 225 230 235 Val Asn Gln Ala Val Lys Cys Thr Arg Lys Ile Asn Leu Glu Gln Cys 245 250 255 Glu Glu Ile Glu Ala Leu Ser Met Ala Phe Tyr Ser Ser Pro Glu Ile 265 270 . 260 Leu Arg Val Pro Asp Ser Arg Lys Lys Val Pro Ile Thr Val Gln Ser 285 275 280 . . Ile Val Ile Gln Ser Leu Asn Lys Thr Leu Thr Arg Arg Glu Asp Thr • 300 295 290 Asp Val Leu Gln Pro Thr Leu Val Asn Ala Gly His Phe Ser Leu Cys 315 320 310 305 Val Asn Val Val Leu Glu Val Lys Tyr Ser Leu Thr Tyr Thr Asp Ala 330 335 325 Gly Glu Val Thr Lys Ala Asp Leu Ser Phe Val Leu Gly Thr Val Ser 350 345 340 Ser Val Val Val Pro Leu Gln Gln Lys Phe Glu Ile His Phe Leu Gln 365 355 360 Glu Asn-Thr Gln Pro Val Pro Leu Ser Gly Asn Pro Gly Tyr Val Val 380 375 370 Gly Leu Pro Leu Ala Ala Gly Phe Gln Pro His Lys Gly Ser Gly Ile 400 . 395 . 390 385 . Ile Gln Thr Thr Asn Arg Tyr Gly Gln Leu Thr Ile Leu His Ser Thr

				405		•			<b>410</b> <sup>.</sup>					415	
Thr	Glu	Gln	Asp 420	Cys	Leu	Ala	Leu	Glu 425		Val	Arg	Thr	Pro 430	Val	Leu
Phe	Gly	Tyr 435	Thr	Met	Gln	Ser	Gly 440	Cys	Lys	Leu	Arg	Leu 445	Thr	Gly	Ala
Leu	Pro 450	Cys	Gln	Leu	Val	Ala 455	Gln	Lys	Val	Lys	Ser 460	Leu	Leu	Trp	Gly
Gln 465	Gly	Phe	Pro	Asp	Tyr 470	Val	Ala	Pro	Phe	Gly 475	Asn	Ser	Gln	Ala	Gln 480
Asp	Met	Leu	Asp	Trp 485	Val	Pro	Ile	His	Phe 490		Thr	Gln	Ser	Phe 495	Asn
Arg	Lys	Asp	Ser 500	Cys	Gln	Leu	Pro	Gly 505	Ala	Leu	Val	Ile	Glu 510	Val	Lys
Trp	Thr	Lys 515	Tyr	Gly	Ser	Leu	Leu 520	Asn	Pro	Gln	Ala	Lys 525	Ile	Val	Asn
Val	Thr 530	Ala	Asn	Ļeu	Ile	Ser 535	Ser	Ser	Phe	Pro	Glu 540	Ala	,Asn	Ser	Gly
Asn 545	Glu	Arg	Thr	Ile	Leu 550	Ile	Ser	Thr	Ala	Val 555	Thr	Phe	Val	Asp	Val 560
Ser	Ala	Pro	Ala	Glu 565	Ala	Gly	Phe	Arg	Ala 570	Pro	Pro	Ala	Ile	Asn 575	Ala
Arg	Leu	Pro	Phe 580	Asn	Phe	Phe	Phe	Pro 585	Phe	<b>Val</b>					

<210> 1416 <211> 157 <212> PRT <213> Homo sapiens

<400> 1416 Met Arg Pro Arg Gly Leu Pro Pro Leu Leu Val Val Leu Leu Gly Cys 1 5 10 15 Trp Ala Ser Val Ser Ala Gln Thr Asp Ala Thr Pro Ala Val Thr Thr 20 25 30 Glu Gly Leu Asn Ser Thr Glu Ala Ala Leu Ala Thr Phe Gly Thr Phe 40 45 Pro Ser Thr Arg Pro Pro Gly Thr Pro Arg Ala Pro Gly Pro Ser Ser 55 50 60 • . . • Gly Pro Arg Pro Thr Pro Val Thr Asp Val Ala Val Leu Cys Val Cys 70 65 <sup>·</sup> 75 80 Asp Leu Ser Pro Ala Gln Cys Asp Ile Asn Cys Cys Asp Pro Asp 85 90 . 95 .

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Cys Ser Ser Val Asp Phe Ser Val Phe Ser Ala Cys Ser Val Pro Val 105 100 110 Val Thr Gly Asp Ser Gln Phe Cys Ser Gln Lys Ala Val Ile Tyr Ser 115 120 125 Leu Asn Phe Thr Ala Asn Pro Pro Gln Arg Val Phe Glu Leu Val Asp 135 130 140 Gln Ile Asn Pro Ser Ile Phe Cys Ile His Ile Thr Asn 145 150 155 <210> 1417 <211> 587 <212> PRT <213> Homo sapiens · <400> 1417 Met Arg Pro Arg Gly Leu Pro Pro Leu Leu Val Val Leu Leu Gly Cys 1 5 10 15 . Trp Ala Ser Val Ser Ala Gln Thr Asp Ala Thr Pro Ala Val Thr Thr 20 25 . 30 Glu Gly Leu Asn Ser Thr Glu Ala Ala Leu Ala Thr Phe Gly Thr Phe 40 . · 35 45 Pro Ser Thr Arg Pro Pro Gly Thr Pro Arg Ala Pro Gly Pro Ser Ser 50 55 60 Gly Pro Arg Pro Thr Pro Val Thr Asp Val Ala Val Leu Cys Val Cys 75' 65 70 Asp Leu Ser Pro Ala Gln Cys Asp Ile Asn Cys Cys Asp Pro Asp 85 90 95 Cys Ser Ser Val Asp Phe Ser Val Phe Ser Ala Cys Ser Val Pro Val 100 105 110 Val Thr Gly Asp Ser Gln Phe Cys Ser Gln Lys Ala Val Ile Tyr Ser 115 · 120 125 Leu Asn Phe Thr Ala Asn Pro Pro Gln Arg Val Phe Glu Leu Val Asp 135 130 140 . Gln Ile Asn Pro Ser Ile Phe Cys Ile His Ile Thr Asn Tyr Lys Pro 145 150 155 160 Ala Leu Ser Phe Ile Asn Pro Glu Val Pro Asp Glu Asn Asn Phe Asp 165 . 170 175 Thr Leu Met Lys Thr Ser Asp Gly Phe Thr Leu Asn Ala Glu Ser Tyr 185 190 180 Val Ser Phe Thr Thr Lys Leu Asp Ile Pro Thr Ala Ala Lys Tyr Glu . 195 200 · 205

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Tyr	Gly 210	Val	Pro	Leu	Gln	Thr 215	Ser	Asp	Ser	Phe	Leu 220	Arg	Phe	Pro	Ser
Ser 225	Leu	Thr	Ser	Ser	Leu 230	Cys	Thr	Asp	Asn	Asn 235	Pro	Ala	Ala	Phe	Leu 240
Val	Asn	Gln	Ala	Val 245	Lys	Cys	Thr	Arg	Lys 250	Ile	Asn	Leu	Glu	Gln 255	Суз
Glu	Glu	Ile	Glu 260	Ala	Leu	Ser	Met	Ala 265	Phe	Tyr	Ser	Ser	Pro 270	Glu	Ile
Leu	Arg	Val 275	Pro.	Asp	Ser	Arg	Lys 280	Lys	Val	Pro	Ile	Thr 285	Val	Gln	Ser
Ile	Val 290	Ile	Gln	Ser	Leu	Asn 295	Lys	Thr	Leu	Thr	Arg 300	Arg	Glu	Asp	Thr
Asp 305	Val	Leu	Gln	Pro	Thr 310	Leu	Val	Asn	Ala	Gly 315	His	Phe	Ser	Leu	Cys 320
Val	Asn	Vaĺ	Val	Leu 325	Glu	Val	Lys	Tyr	Ser 330	Leu	Thr	Tyr	Thr	Asp 335	Ala
Gly	Glu	Val	Thr 340	Lys	Ala	Asp	Leu	Ser 345	Phe	Val	Leu	Gly	Thr 350		Ser
Ser	Val	Val 355	Val	Pro	Leu	Gln	Gln 360	Lys	Phe	Glu	Ile	His 365	Phe	Leu	Gln
Glu	Asn 370	Thr	Gln	Pro	Val	Pro 375	Leu	Ser	Gly	Asn	Pro 380	Gly	Tyr	Val	Val
Gly 385	Leu	Pro	Leu	Ala	Ala 390		Phe	Gln	Pro	His 395	Lys	Gly	Ser	Gly	Ile 400
Ile	Gln	Thr	Thr	Àsn 405	Arg	Тут	Gly	Gln	Leu 410	Thr	Ile	Leu	His	Ser 415	Thr
Thr	Glu	Gln		Cys	Leu	Ala	Leu	Glu 425	Gly	Val	Arg	Thr	Pro 430	Val	Leu
		435			Gln		440				<u>ـ</u> د	445			
	450				Val	455					460		,		
Gln 465	Gly	Phe	Pro	Asp	Tyr 470	Val	Ala	.Pro	Phe	Gly 475	Asn	Ser	Gln	Ala	Gln 480
Asp	Met	Leu	Asp	Trp 485	Val	Pro	Ile	His	Phe 490	Ile	Thr	Gln	Ser	Phe 495	Asn '
Arg	Lys	Asp	Ser 500	Суз	Gln	Leu	Pro	Gly 505	Ala ;	Leu	Val	Ile	Glu 510	Val	Lys
Trp	Thr	Lys 515	Tyr	Gly	Ser	Leu	Leu 520	Asn	Pro	Gľn	Ala	Lys .525	Ile	Val	·Asn

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WO 01/77137 PCT/US01/11988 Val Thr Ala Asn Leu Ile Ser Ser Ser Phe Pro Glu Ala Asn Ser Gly 530 535 540 . Asn Glu Arg Thr Ile Leu Ile Ser Thr Ala Val Thr Phe Val Asp Val 550 555 545 560 Ser Ala Pro Ala Glu Ala Gly Phe Arg Ala Pro Pro Ala Ile Asn Ala 565 570 575 Arg Leu Pro Phe Asn Phe Phe Phe Pro Phe Val . 580 · · 585 <210> 1418 <211> 137 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (117) <223> Xaa equals any of the naturally occurring L-amino acids <220> · 3 · <221> SITE <222> (133) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (137) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1418 Met Val Glu Glu Pro Gly Arg Phe Leu Pro Leu Trp Leu His Ile Leu 1 10 1.5 Leu Ile Thr Val Leu Leu Val Leu Ser Gly Ile Phe Ser Gly Leu Asn 20 25 30 Leu Gly Leu Met Ala Leu Asp Pro Met Glu Leu Arg Ile Val Gln Asn 40 45 35 . -Cys Gly Thr Xaa Lys Glu Arg Arg Tyr Ala Arg Lys Ile Glu Pro Ile 50 . -55 60 Arg Arg Lys Gly Asn Tyr Leu Leu Cys Ser Leu Leu Leu Gly Asn Val 70 65 75 80 Leu Val Asn Thr Ser Leu Thr Ile Leu Leu Asp Asn Leu Ile Gly Ser 85 90 95 Gly Leu Met Ala Val Ala Ser Phe Thr Ile Gly Ile Cys His Leu Trp 100 · 105 110

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Gly Asp Pro Thr Xaa Gly Pro Cys Ala Pro Arg His Gly Ala Trp Leu . 115 125 120 Val Gly Cys Gln Xaa Pro Cys Phe Xaa 130 135 <210> 1419 <211> 157 <212> PRT <213> Homo sapiens <220> . <221> SITE <222> (90) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1419 Leu Lys Pro Phe Ser Gln Thr Pro Tyr Phe Glu Ser Pro Ser Phe Ser 1 . 5 10 1.5 Pro Ser Trp Gly Trp Arg Gln Glu Asp Met Trp Glu Ala Thr Glu Ala 20 25 30 Gly Ser Leu Cys Pro Leu Leu Cys Gly Trp Gln Gly Ser Pro Gly Leu 35 . 40 45 . Ile His Pro Leu Met Glu Pro Gln Glu Arg Arg Ala Pro Pro Lys Gly 50 55 60 Met Gln Leu Ala Ala Pro Leu Ser His Thr Cys Asp Pro Ser Val Arg 65 70 75 80 Gly His Pro Ala Leu Ala Glu Val Ser Xaa Thr Val Leu Arg Ala Leu . 85 90 95 Pro Ser Cys Glu Phe Leu Pro Trp Arg Leu Phe Pro Gly Ala Glu Ser 100 105 110 . Gly Pro Ala Ala Lys Leu Gln Ala Ser Gln Gly Trp Gly Gly Cys Gly 115 120 125 Thr Lys Val His Val Gly Pro Ser Thr Gly Cys Ser Arg Ser Trp Val 130 135 140 Pro Arg Ala Trp Gln Val Lys Leu Cys Arg Pro Ser Ala 145 150 155 <210> 1420 <211> 631 <212> PRT <213> Homo sapiens <400> 1420 Met Lys Leu Tyr Ala Leu Cys Thr Arg Ala Gln Pro Asp Gly Pro Trp 5 1 10 15

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Leu	Lys	Trp	Thr 20	Asp	Lys	Asp	Ser	Leu 25	Leu	Phe	Met	Val	Glu 30	Glu	Pro
Gly	Arg	Phe 35	Leu	Pro	Leu	Trp	Leu 40	His	Ile	Leu	Leu	Ile 45	Thr	Val	Leu
Leu	Val 50	Leu	Ser	Gly	Ile	Phe 55	Ser	Gly	Leu	Asn	Leu 60	Gly	Leu	Met	Ala
Leu 65	Asp	Pro	Met	Glu	Leu 70	Arg	Ile	Val	Gln	Asn 75	Cys	Gly	Thr	Glu	Lys 80
Ģlu	Arg	Arg	Tyr	Ala 85	Arg	Lys	Ile	Glu	Pro 90	Ile	Arg	Arg	Lys	Gly 95	Asn
Tyr	Leu	Leu	Cys 100	Ser	Leu	Leu	Leu	Gly 105	Asn	Val	Leu	Val	Asn 110	Thr	Ser .
Leu	Thr	Ile 115	Leu	Leu	Asp	Asn	Leu 120	Ile	Gly	Ser	Gly	Leu 125	Met	Ala	Val
Ala	Ser 130	Ser	Thr	Ile	Gly	Ile 135	Val 、	Ile	Phe	Gly	Glu 140	Ile	Leu	Pro	Gln
Ala 145	Leu	Cys	Ser	Arg	His 150	Gly	Leu	Ala	Val	Gly 155	Ala	Asn	Thr	Ile	Leu 160
Leu	Thr	Lys '	Phe	Phe 165	Met <sub>.</sub>	Leu	Leu	Thr	Phe 170	Pro	Leu	Ser	Phe	Pro 175	
Ser	Lys	Leu	Leu 180	Asp	Phe	Phe	Leu	Gly 185	Gln	Glu	Ile	Arg	Thr 190	Val	Tyr
Asn	Arg	Glu 195	Lys	Leu	Met	Glu <sub>.</sub>	Met 200	Leu	Lys	Val	Thr	Glu 205	Pro	Tyr	Asn
	Leu 210	Val	Lys	Glu	Glu	Leu 215	Asn	Met	Ile	Gln	Gly 220	Ala	Leu	Glu	Leu
Arg 225	Thr	Lys	Thr	Val	Glu 230	Asp	Ile	Met	Thr	Gln 235		Gln	Asp	Cys	Phe 240
Met	<u></u> Įle	Arg	Ser <sup>`</sup>	Asp 245	Ala	Ile	Leu	Asp	Phe 250		Thr	Met	Ser	Glu 255	Ile
Met	Glu	Ser	Gly 260	Tyr	Thr	Arg	Ile	Pro 265	Val	Phe	Glu	Asp	Glu 270	Gln	Ser
Asn	Ile	Val 275	Asp	Ile	Leu	Tyr	Val 280	Lys <sub>.</sub>	Asp	Leu	Ala	Phe 285	Val	Asp	Pro
Asp	Asp 290	Cys	Thr	Pro	Leu	Lys 295	Thr	Ile	Thr		Phe 300	Tyr	Asn	His	Pro
Val 305	His	Phe	Val	Phe	His 310	Asp	Thr	Lys	Leu	Asp 315	Ala	Met	Leu	Glu	Glu 320
Phe	Lys	Lys	Gly	Lys 325	Ser	His	Leu	Ala	Ile 330	Val	Gln	Lys	Val	Asn 335	Asn

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•	Glu	Gly	Glu	Gly 340	Asp	Pro	Phe	Tyr	Glu 345	Val	Leu	Gly	Leu	Val 350	Thr	Leu
	Glu	Asp	Val 355	Ile	Glu	Glu	Ile	Ile 360	Lys	Şer	Glu	Ile	Leu 365	Asp	Glu	Ser
	Asp	Met 370	Tyr	Thr	Asp	Asn	Arg 375	Ser	Arg	Lys	Arg	Val 380	Ser	Glu	Lys	Asn
	Lys 385	Arg	Asp	Phe	Ser	Ala 390	Phe	Lys	Asp	Ala	Asp 395	Asn	Glu	Leu	Lys	Val 400
	Lys	Ile	Ser	Pro	Gln 405	Leu	Leu	Leu	Ala	Ala 410	His	Arg	Phe	Leu	Ala 415	Thr
	Glu	Val	Ser	Gln 420	Phe	Ser	Pro	Ser	Leu 425	Ile	Ser	Glu	Lys	Ile 430	Leu	Leu
	Arg	Leu	Leu 435	Lys	Tyr	Pro	Asp	Val 440	Ile	Gln	Glu	Leu	Lys 445	Phe	Asp	Glu
	Hịs	Ásn 450	Lýs	Tyr	Tyr	Ala	Arg 455	His	Tyr	Leu	Tyr	Thr 460	Arg	Asn	Lys	Pro
	Ala 465	Asp	Tyr	Phe	Ile	Leu 470	Ile	Leu	Gln	Gly	Lys 475	Val	Glu	Val	Glu	Ala 480
	Gly	Lys	Glu	Asn	Met 485	Lys	Phe	Glu	Thr	Gly 490	Ala	Phe	Ser	Tyr	Tyr 495	Gly
	Thr	Met	Ala	Leu 500	Thr	Ser	Val	Pro	Ser 505	Asp	Arg	Ser	Pro	Ala 510	His	Pro
	Thr	Pro	Leu 515	Ser	Arg	Ser	Ala	Ser 520	Leu	Ser	Tyr	Pro	Asp 525	Arg	Thr	Asp
		Ser 530	Thr	Ala	Ala	Thr	Leu 535	Ala	Gly	Ser	Ser	Asn 540	Gln	Phe	Gly	Ser
	Ser 545	Val	Leu	Gly	Gln	Tyr 550	Ile	Ser	Asp	Phe	Ser 555	Val	Arg	Ala	Leu	Val 560
·	Asp ·	Leu	Gln	Tyr	Ile 565	Lys	Ile	Thr	Arg	Gln 570	Gln	Tyr	Gln	Asn	Gly 575	Leu
-				580	Met				585				•	590		
-	Thr	Thr	His 595	Met	Glu	Asn	Leu	Ala 600	Glu '	Lys	Ser	Glu	Leu 605	Pro	Val	Val
	Asp	Glu 610	Thr	Thr	Thr	Leu	Leu 615	Asn	Glu	Arg	Asn	Ser 620	Leu	Leu	His	Lys · .
	Ala 625	Ser	His	Glu	Asn	Ala 630	Ile									-

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<210> 1421 <211> 83 <212> PRT <213> Homo sapiens <400> 1421 Met Gly Val Arg Val Trp Glu Leu Pro Ala Gln Pro Thr Gly Leu His 1 5 10 15 Leu Leu Cys Phe Cys Thr Arg Thr Met Leu Leu Ala Leu Lys Leu Pro • 20 25 . 30 Lys Thr Lys His Ser Phe Pro Asp Pro Tyr Thr Ser Ile Leu Ser Phe 35 40 45 · Ile His Pro Ala Phe Thr Glu Asn Leu Thr Leu Cys Gln Val Ser Val 50 55 60 Phe Leu Ser Ser Ser Asn Thr Glu Met Asn Gln Met Phe His Gly Val 65 <sub>.</sub> 70 75 80 Ser Phe Arg <210> 1422 <211> 103 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (86) <223> Xaa equals any of the naturally occurring L-amino acids · · . <220> <221> SITE <222> (87) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (93) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <sup>-</sup><222> (94) <223> Xaa equals any of the naturally occurring L-amino acids <220> -<221> SITE <222> (96) <223> Xaa equals any of the naturally occurring L-amino acids . <400> 1422 Met Met Ala Ser Ile Gln Ser Phe Ser Ala Met Ala Leu Leu Phe Tyr . 1 5 10 15 .

WO 01/77137 PCT/US01/11988 Thr Val Phe Met Phe Val Ile Val Leu Ser Ser Leu Lys His Gly Leu 20 25 30 Phe Ser Gly Gln Trp Leu Arg Arg Val Ser Tyr Val Arg Trp Glu Gly 35 40 45 Val Phe Arg Cys Ile Pro Ile Phe Gly Met Ser Phe Ala Cys Gln Ser 50 55 60 Gln Val Leu Pro Thr Tyr Asp Ser Leu Asp Glu Pro Ser Val Lys Thr . 70 65 75 80 Met Ser Ser Ile Phe Xaa Xaa Ser Leu Asn Val Val Xaa Xaa Phe Xaa 85 90 95 Val Met Val Gly Val Phe Arg 100 <210> 1423 <211> 384 . <212> PRT <213> Homo sapiens <220> <221> SITE <222> (96) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (131) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1423 Gln Arg Gln Glu Asp Glu Glu Asp Lys Pro Arg Gln Val Glu Val His 1 5 10 15 . Gln Glu Pro Gly Ala Ala Val Pro Arg Gly Gln Glu Ala Pro Glu Gly 20 25 30 Lys Ala Arg Glu Thr Val Glu Asn Leu Pro Pro Leu Pro Leu Asp Pro 40 . 45 35 Val Leu Arg Ala Pro Gly Gly Arg Pro Ala Pro Ser Gln Asp Leu Asn 50 55 60 Gln Arg Ser Leu Glu His Ser Glu Gly Pro Val Gly Arg Asp Pro Ala 65 70 75 80 Gly Pro Pro Asp Gly Gly Pro Asp Thr Glu Pro Arg Ala Ala Gln Xaa 85 90 95 Lys Leu Arg Asp Gly Gln Lys Asp Ala Ala Pro Arg'Ala Ala Gly Thr · . 100 105 · 110 Val Lys Glu Leu Pro Lys Gly Pro Glu Gln Val Pro Val Pro Asp Pro 115 120. 125

Ala Arg Xaa Ala Gly Gly Pro Glu Glu Arg Leu Ala Glu Glu Phe Pro . Gly Gln Ser Gln Asp Val Thr Gly Gly Ser Gln Asp Arg Lys Lys Pro Gly Lys Glu Val Ala Ala Thr Gly Thr Ser Ile Leu Lys Glu Ala Asn Trp Leu Val Ala Gly Pro Gly Ala Glu Thr Gly Asp Pro Arg Met Lys Pro Lys Gln Val Ser Arg Asp Leu Gly Leu Ala Ala Asp Leu Pro Gly Gly Ala Glu Gly Ala Ala Ala Gln Pro Gln Ala Val Leu Arg Gln Pro Glu Leu Arg Val Ile Ser Asp Gly Glu Gln Gly Gly Gln Gln Gly His Arg Leu Asp His Gly Gly His Leu Glu Met Arg Lys Ala Arg Gly Gly 250 、 Asp His Val Pro Val Ser His Glu Gln Pro Arg Gly Gly Glu Asp Ala . 260 Ala Val Gln Glu Pro Arg Gln Arg Pro Glu Pro Glu Leu Gly Leu Lys Arg Ala Val Pro Gly.Gly Gln Arg Pro Asp Asn Ala Lys Pro Asn Arg Asp Leu Lys Leu Gln Ala Gly Ser Asp Leu Arg Arg Arg Arg Arg Asp Leu Gly Pro His Ala Glu Gly Gln Leu Ala Pro Arg Asp Gly Val Ile Ile Gly Leu Asn Pro Leu Pro Asp Val Gln Val Asn Asp Leu Arg Gly . Ala Leu Asp Ala Gln Leu Arg Gln Ala Ala Gly Gly Ala Leu Gln Val Val His Ser Arg Gln Leu Arg Gln Ala Pro Gly Pro Pro Glu Glu Ser 

<210> 1424 <211> 973 <212> PRT <213> Homo sapiens

<400> 1424 Met Met Ala Ser Ile Gln Ser Phe Ser Ala Met Ala Leu Leu Phe Tyr

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Thr	Val	Phe	Met 20	Phe	Val	Ile	Val	Leu 25	Ser	Ser	Leu	Lys	His .30	Gly	Leu	
Phe	Ser	Gly 35	Gln	Trp	Leu	Arg	Arg 40	Val	Ser	Tyr	Val	Arg 45	Trp	Glu	Gly	
Val	Phe 50	Arg	Cys	Ile	Pro	Ile 55	Phe	Gly	Met	Ser	Phe 60	Ala	Cys	Gln	Ser	
Gln 65	Val	Leu	Pro	Thr	Tyr 70	Asp	Ser	Leu	Asp	Glu 75	Pro	Ser	Val	Lys	Thr 80	
Met	Ser	Ser	Ile	Phe 85	Ala	Ser	Ser	Leu	Asn 90	Val	Val	Thr	Thr	Phe 95	Tyr	
Val	Met		Gly 100	Phe	Phe	Gly	Tyr	Val 105	Ser	Phe	Thr	Glu	Ala 110	Thr	Ala	
Gly	Asn	Val 115	Leu	Met	His	Phe	Pro 120	Ser	Asn	Leu	Val	Thr 125	Gļu	Met	Leu	
Arg	Val 130	Gly	Phe	Met	Met	Ser 135	Val	Ala	Val	Gly	Phe 140	Pro	Met	Met	Ile	
Leu 145	Pro	Cys	Arg	Gln	Ala 150	Leu	Ser	Thr	Leu	Leu 155	Cys	Glu	Gln	Gln	Gln 160	
Lys	Asp	Gly	Thr	Phe 165	Ala	Ala	Gly	Gly	Tyr 170	Met	Pro	Pro	Leu	Arg 175	Phe <sub>.</sub>	
Lys	Ala	Leu	Thr 180	Leu	Ser	Val	Val	Phe 185	Gly	Thr	Met	Val	Gly 190	Gly	Ile	
Leu	Ile	Pro 195	Asn	Val	Glu	Thr	Ile 200	Leu.	Gly	Leu	Thr	Gly 205	Ala	Thr	Met	
Gly	Ser 210	Leu	Ile	Cys	Phe	Ile 215	Cys	Pro	Ala	Leu	Ile 220	Tyr	.Lys	Lys	Ile	
His 225	Lys	Asn	Ala	Leu	Ser 230	Ser	Gln	Val	Val <sup>.</sup>	Leu 235	Trp	Val	Gly.	Leu	Gly 240	
Val	Leu	Val		Ser 245	Thr	Val	Thr	Thr	Leu 250	Ser	Val	Ser	Glu	Glu 255 ,	Val	-
Pro	Glu	Asp	Leu 260	Ala	Glu	Glu	Ala	Pro 265	Gly	Gly '	Arg	Leu	Gly 270	Glu	Ala	
Glu	Gly	Leu 275	Met	Lys	Val	Glu	Ala 280	Ala	Arg	Leu	Ser	Ala 285	Gln	Asp	Pro	
Val	Val 290	Ala	Val	Ala	Glu	Asp 295	Gly	Arg	Glu	Lys	Pro 300	-	Leu	Pro	Lys	
305	Arg			•	310					315	_			-	320	
Pro	Gly	Arg	Glu	Asp	Gly	гла	Glu		Pro 360	Glu	Glu	Ala	Gln	Leu	Asp	

Arg Pro Gly Gln Gly Ile Ala Val Pro Val Gly Glu Ala His Arg His Glu Pro Pro Val Pro His Asp Lys Val Val Val Asp Glu Gly Gln Asp Arg Glu Val Pro Glu Glu Asn Lys Pro Pro Ser Arg His Ala Gly Gly Lys Ala Pro Gly Val Gln Gly Gln Met Ala Pro Pro Leu Pro Asp Ser Glu Arg Glu Lys Gln Glu Pro Glu Gln Gly Glu Val Gly Lys Arg Pro Gly Gln Ala Gln Ala Leu Glu Glu Ala Gly Asp Leu Pro Glu Asp Pro Gln Lys Val Pro Glu Ala Asp Gly Gln Pro Ala Val Gln Pro Ala Lys Glu Asp Leu Gly Pro Gly Asp Arg Gly Leu His Pro Arg Pro Gln Ala . 450 Val Leu Ser Glu Gln Gln Asn Gly Leu Ala Val Gly Gly Gly Glu Lys Ala Lys Gly Gly Pro Pro Pro Gly Asn Ala Ala Gly Asp Thr Gly Gln Pro Ala Glu Asp Ser Asp His Gly Gly Lys Pro Pro Leu Pro Ala Glu Lys Pro Ala Pro Gly Pro Gly Leu Pro Pro Glu Pro Arg Glu Gln Arg . 520 Asp Val Glu Arg Ala Gly Gly Asn Gln Ala Ala Ser Gln Leu Glu Glu Ala Gly Arg Ala Glu Met Leu Asp His Ala Val Leu Leu Gln Val Ile Lys Glu Gln Gln Val Gln Gln Lys Arg Leu Leu Asp Gln Gln Glu Lys Leu Leu Ala Val Ile Glu Glu Gln His Lys Glu Ile His Gln Gln Arg · 580 Gln Glu Asp Glu Glu Asp Lys Pro Arg Gln Val Glu Val His Gln Glu Pro Gly Ala Ala Val Pro Arg Gly Gln Glu Ala Pro Glu Gly Lys Ala Arg Glu Thr Val Glu Asn Leu Pro Pro Leu Pro Leu Asp Pro Val Leu Arg Ala Pro Gly Gly Arg Pro Ala Pro Ser Gln Asp Leu Asn Gln Arg

. 655 Ser Leu Glu His Ser Glu Gly Pro Val Gly Arg Asp Pro Ala Gly Pro . Pro Asp Gly Gly Pro Asp Thr Glu Pro Arg Ala Ala Gln Gly Lys Leu Arg Asp Gly Gln Lys Asp Ala Ala Pro Arg Ala Ala Gly Thr Val Lys 690 . Glu Leu Pro Lys Gly Pro Glu Gln Val Pro Val Pro Asp Pro Ala Arg .705 Glu Ala Gly Gly Pro Glu Glu Arg Leu Ala Glu Glu Phe Pro Gly Gln 730 · Ser Gln Asp Val Thr Gly Gly Ser Gln Asp Arg Lys Lys Pro Gly Lys Glu Val Ala Ala Thr Gly Thr Ser Ile Leu Lys Glu Ala Asn Trp Leu Val Ala Gly Pro Gly Ala Glu Thr Gly Asp Pro Arg Met Lys Pro Lys Gln Val Ser Arg Asp Leu Gly Leu Ala Ala Asp Leu Pro Gly Gly Ala Glu Gly Ala Ala Ala Gln Pro Gln Ala Val Leu Arg Gln Pro Glu Leu . . . . Arg Val Ile Ser Asp Gly Glu Gln Gly Gly Gln Gln Gly His Arg Leu 820 825 Asp His Gly Gly His Leu Glu Met Arg Lys Ala Arg Gly Gly Asp His Val Pro Val Ser His Glu Gln Pro Arg Gly Gly Glu Asp Ala Ala Val Gln Glu Pro Arg Gln Arg Pro Glu Pro Glu Leu Gly Leu Lys Arg Ala . Val Pro Gly Gly Gln Arg Pro Asp Asn Ala Lys Pro Asn Arg Asp Leu - 890 Lys Leu Gln Ala Gly Ser Asp Leu Arg Arg Arg Arg Arg Asp Leu Gly Pro His Ala Glu Gly Gln Leu Ala Pro Arg Asp Gly Val Ile Gly Leu 915 . . 920 Asn Pro Leu Pro Asp Val Gln Val Asn Asp Leu Arg Gly Ala Leu Asp 935 . Ala Gln Leu Arg Gln Ala Ala Gly Gly Ala Leu Gln Val Val His Ser Arg Gln Leu Arg Gln Ala Pro Gly Pro Pro Glu Glu Ser

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<210> 1425 <211> 110 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (89) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (96) <223> Xaa equals any of the naturally occurring L-amino acids . <220> <221> SITE <222> (104) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1425 Met Tyr Leu Gln Ile Pro Val Lys His Met Leu His Ser Gly Tyr Gln 5 10 15 1 Ala Thr Phe Phe Ser Pro Lys Ile Gly Cys Ser Ser Ile Leu Val Phe 20 . 25 30 Val Cys Leu Leu Val Phe Leu Arg Gln Ser Leu Ala Leu Leu Pro Arg 35 40 45 ; Leu Glu Tyr Ser Gly Ala Ile Leu Ala His Cys Asn Leu His Leu Leu 50 55 60 . Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Pro Val Ala Gly Ile Thr 70 75 65 80 Gly Met His His His Thr Gln Leu Xaa Phe Cys Thr Phe Ser Arg Xaa 85 90 95 Gly Ile Tyr Gln Leu Ala Ser Xaa Ser Pro Asn Pro Asp Leu 100 105 110 <210> 1426 <211>.57 <212> PRT <213> Homo sapiens <400> 1426 Phe Asn Thr Pro Lys Ile Phe Phe Gly Thr Tyr His Arg Gln Gly Thr 5 10 15 1 Leu Ile Ser Thr Gly Asp Thr Ile Ser Cys Leu Gly Leu Leu Cys Ser 20 · 25 . 30 863

#### WO 01/77137 PCT/US01/11988 Ser Ala Ala Arg Glu Gly Ile Ala Ile Cys Arg Ile Leu Lys Lys His 35 40 Lys His Lys Gly Ala Lys Leu Tyr Ile 50 55 <210> 1427 <211> 127 <212> PRT <213> Homo sapiens <400> 1427 Met Leu His Ser Gly Tyr Gln Ala Thr Phe Phe Ser Pro Lys Ile Gly 10 15 1 5 Cys Ser Ser Ile Leu Val Phe Val Cys Leu Leu Val Phe Leu Arg Gln · 20 25 . 30 Ser Leu Ala Leu Leu Pro Arg Leu Glu Tyr Ser Gly Ala Ile Leu Ala 45 35 40 . His Cys Asn Leu His Leu Leu Gly Ser Ser Asp Ser Pro Ala Ser Ala 55 50 60 Ser Pro Val Ala Gly Ile Thr Gly Met His His His Thr Gln Leu Phe 70 75 80 Phe Cys Thr Phe Ser Arg Asp Gly Ile Leu Pro Cys Trp Pro Gly Trp 85 . 90 95 Ser Pro Thr Pro Asp Leu Arg Gln Ser Thr Leu Leu Ser Leu Pro Lys 100 105 110 Cys Trp Asp Tyr Arg His Glu Pro Leu Arg Pro Ala Gln Ala Phe 115 120 · . 125 <210> 1428 <211> 80 <212> PRT <213> Homo sapiens <400> 1428 Met Phe Ile Pro Gln Leu Pro Ala Leu Gly Leu Thr Ser Leu Met Met 5 10 1 15 Ala Ile Ser Leu Asn Val Ser Val Ser Gln Gly Leu Ser Ser Ala Cys 20 25 30 Met His Leu Arg Met Gln Ala Cys Lys Pro Thr Arg Val Gln Ala Lys 40 . . 35 45 Val Leu Gly Asp Trp Val Gln Glu Asn His Val Ile Glu Asn Gly Ala 50 55 60

Thr Leu Arg Pro Trp Gln Asp Pro Leu His Asp Lys Tyr Arg Met Lys65707580

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<210> 1429 <211> 73 <212> PRT <213> Homo sapiens . <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1429 His Phe Ser Phe Trp Phe Ile His Phe Pro His Phe His Leu Lys Ile 15 1 10 Leu Thr Lys Cys Leu Ala Glu Phe Ser Lys Tyr Asn Asn Phe Thr Leu 20 25 30 Pro Ala Asp Asn Glu Xaa Ile Arg Val Gln Asn Pro Phe Gln Leu Ser · 40 35 45 • . Lys His Leu Leu Ser Leu Tyr Phe Val Ser Asp Thr Gly Val Lys Phe 50 55 60 Trp Lys Cys Lys Arg Asn Leu His Leu 65 70 · · <210> 1430 <211> 80 <212> PRT <213> Homo sapiens <400> 1430 Met Phe Ile Pro Gln Leu Pro Ala Leu Gly Leu Thr Ser Leu Met Met 15 1 5 10 Ala Ile Ser Leu Asn Val Ser Val Ser Gln Gly Leu Ser Ser Ala Cys 20 25 30 Met His Leu Arg Met Gln Ala Cys Lys Pro Thr Arg Val Gln Ala Lys 35 40 45 Val Leu Gly Asp Trp Val Gln Glu Asn His Val Ile Glu Asn Gly Ala , 50 · .55 . 60 Thr Leu Arg Pro Trp Gln Asp Pro Leu His Asp Lys Tyr Arg Met Lys . 70 75 65 . 80

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<210> 1431 <211> 26 <212> PRT <213> Homo sapiens <400> 1431 Met Leu Arg Trp His Leu Trp Ser Trp Phe Cys Trp Phe Cys Leu Ser 1. 5 10 15 Glu Ala Gly Val Leu Leu Asp Leu Pro Thr 20 25 <210> 1432 <211> 84 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids . <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE . . <222> (42) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (64) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (79) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1432 Xaa Met Ser Arg Gln His Arg Leu Asn Pro His Gly Pro Asp Pro Ala 1 · - 5 10 15 Ala Pro His Arg Ala Cys Arg Leu Xaa Ser Pro Arg Gln Val Thr Trp 20 25 30 Leu Thr Pro Ala Glu Ala Leu Pro Leu Xaa Pro Cys Pro Ser Gln Cys 35 . 40 45 Gly Ala His Cys Arg Gln His Gly Pro Glu Arg Glu Gly Ser Ala Xaa 50 55 ' 60 Pro Ala Ala Leu Leu Arg Pro Gly Leu Pro Val Phe Gly His Xaa Leu . 75 , . 80 . 70 65

Arg Leu Ser Gln . <210> 1433 <211> 26 <212> PRT <213> Homo sapiens <400> 1433 Met Leu Arg Trp His Leu Trp Ser Trp Phe Cys Trp Phe Cys Leu Ser 1 5 10 15 Glu Ala Gly Val Leu Leu Asp Leu Pro Thr 20 25 <210> 1434 <211> 139 <212> PRT . • • , \* <213> Homo sapiens <400> 1434 Met Ala Leu Arg Met Leu Trp Ala Gly Gln Ala Lys Gly Ile Leu Gly 5 1 10 15 Gly Trp Gly Ile Ile Cys Leu Val Met Ser Leu Leu Leu Gln His Pro 20 25 30 Gly Val Tyr Ser Lys Cys Tyr Phe Gln Ala Gln Ala Pro Cys His Tyr 35 40 45 Glu Gly Lys Tyr Phe Thr Leu Gly Glu Ser Trp Leu Arg Lys Asp Cys 50 55 60 Phe His Cys Thr Cys Leu His Pro Val Gly Val Gly Cys Cys Asp Thr 65 70 75 80 Ser Gln His Pro Ile Asp Phe Pro Ala Gly Cys Glu Val Arg Gln Glu 85 90 95 Ala Gly Thr Cys Gln Phe Ser Leu Val Gln Lys Ser Asp Pro Arg Leu 100 105 110 Pro Cys Lys Gly Gly Gly Pro Asp Pro Glu Trp Gly Ser Ala Asn Thr 115 120 125 · Pro Val Pro Gly Ala Pro Ala Pro His Ser Ser . 130 135 <210> 1435 <211> 139

<212> PRT <213> Homo sapiens

<400> 1435

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Met Ala Leu Arg Met Leu Trp Ala Gly Gln Ala Lys Gly Ile Leu Gly 5 10 15 Gly Trp.Gly Ile Ile Cys Leu Val Met Ser Leu Leu Cln His Pro 20 25 30 . Gly Val Tyr Ser Lys Cys Tyr Phe Gln Ala Gln Ala Pro Cys His Tyr 40 . 45 35 Glu Gly Lys Tyr Phe Thr Leu Gly Glu Ser Trp Leu Arg Lys Asp Cys 55 60 50 Phe His Cys Thr Cys Leu His Pro Val Gly Val Gly Cys Cys Asp Thr 65 70 75 80 Ser Gln His Pro Ile Asp Phe Pro Ala Gly Cys Glu Val Arg Gln Glu 90 85 95 Ala Gly Thr Cys Gln Phe Ser Leu Val Gln Lys Ser Asp Pro Arg Leu 105 100 110 Pro Cys Lys Gly Gly Gly Pro Asp Pro Glu Trp Gly Ser Ala Asn Thr 115 120 125 Pro Val Pro Gly Ala Pro Ala Pro His Ser Ser 130 135 <210> 1436 <211> 80 <212> PRT <213> Homo sapiens <400> 1436 Met Phe Asp Arg Cys Arg Val Thr Ser Cys Ser Cys Thr Cys Gly Ala 1 5 10 15 Gly Ala Lys Trp Cys Thr His Val Val Ala Leu Cys Leu Phe Arg Ile 20 25 30 . His Asn Ala Ser Ala Val Cys Leu Arg Ala Pro Val Ser Glu Ser Leu 35 40 45 Ser Arg Leu Gln Arg Asp Gln Leu Gln Lys Phe Ala Gln Tyr Leu Ile 50 60 55 Ser Glu Leu Pro Gln Gln Val Gly Glu Val Gly Thr Pro Ser Cys Asn - 80 75 65 70

<210> 1437 <211> 145 <212> PRT <213> Homo sapiens

<400> 1437 Asp Pro Ser Gly Ser Phe Met Gly Arg Ser Val Met Met Arg Ile Leu 5 10 15 1 . Gly Ser Pro Val Phe Phe Pro Met His Asp Thr Ser Val Cys Leu Thr 20 25 30 Tyr Pro Asn Phe Tyr Thr Val Val Ser Pro Thr Gly Ser Arg Pro Pro 35 • 40 45 Ser Arg Asn Trp Asn Ser Glu Thr Pro Gly Asp Glu Glu Leu Gly Phe 50 55 60 . Glu Ala Ala Val Ala Ala Leu Gly Met Lys Thr Thr Val Ser Glu Ala 70 75 65 80 Glu His Pro Leu Leu Cys Glu Gly Thr Arg Arg Glu Lys Gly Asp Leu 85 90 95 Ala Leu Ala Leu Met Ile Thr Tyr Lys Asp Asp Gln Ala Lys Leu Lys 105· 100 110 Lys Lys Ile Ser Arg Ala Trp Trp Arg Ala Pro Val Val Pro Ala Thr 115 120 125 Arg Glu Ala Glu Val Gly Glu Leu Leu Glu Pro Arg Ser Leu Arg Leu . 135 130 140 Gln 145 <210> 1438 <211> 80 <212> PRT <213> Homo sapiens <400> 1438 Met Phe Asp Arg Cys Arg Val Thr Ser Cys Ser Cys Thr Cys Gly Ala 5 10 15 1 Gly Ala Lys Trp Cys Thr His Val Val Ala Leu Cys Leu Phe Arg Ile 20 25 30 His Asn Ala Ser Ala Val Cys Leu Arg Ala Pro Val Ser Glu Ser Leu 40 · 35 45 Ser Arg Leu Gln Arg Asp Gln Leu Gln Lys Phe Ala Gln Tyr Leu Ile 50 55 60 Ser Glu Leu Pro Gln Gln Val Gly Glu Val Gly Thr Pro Ser Cys Asn 65 70 75 80

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100 105 110 Thr Gln Tyr Val Cys Ile Arg Gly Val Phe Ile Leu Thr Thr Gly Met 115 120 125 . Arg Leu Pro Xaa Arg His Ala Arg Ser 130 135 <210> 1441 <211> 94 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1441 Pro Tyr Pro Phe Cys Xaa Pro Ser Pro Phe Pro Ser Ser Ala Ala Pro 5 . 15 1 10 His Ser Gln Ser Asp Ala Ala Gly Thr Thr Ile Thr Arg Ser Gly Gln 20 25 30 Val Asn Arg Asp Thr Ser Asn Ser Arg Ala Gly Leu Pro Pro Ala Phe 35 40 45 Trp Glu Gly Lys Arg Cys Ser Pro Glu Leu Ile Pro Ser Asp Ser Ala 50 55 60 Ala Arg Leu Val Gly Leu Leu Phe Pro Thr Phe Cys Phe Phe Phe 65 70 75 80 Leu Cys Lys Ser Gln Met Leu Leu Ser Ile Ala Phe Cys Asp 85 90 <210> 1442 .<211> 104 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (104) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1442 Met Gly Phe Ser Gly Pro Ala Leu Leu Phe Pro Ile Phe Leu Leu His <u>.</u> 5 1 10 . 15 Ser Ala Ser Ser Met Leu Ser His Thr Ser Thr Ile Val Gln Thr Asn 20 25 30 Lys Gln Thr Glu Glu Arg Lys Asp Gly Glu Phe Cys Asn Arg Ala Ala

35 40 45

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Lys Ser Gln Ser Lys Gln Glu Glu Val Glu Gly Thr Lys Thr Asn Lys 50 .. . ` 55 60 Gln Arg Cys Leu Asp Tyr Ser Thr Val Asp Met Pro Ser Ile Leu Ala 65 70 75 80 . Cys Ala Pro Leu Ser Ile Thr Gly His Asn Ser Glu Glu Val Gln Ile · . 85 90 95 Lys Trp Cys Leu Phe Val Cys Xaa 100 <210> 1443 <211> 104 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (104) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1443 Met Gly Phe Ser Gly Pro Ala Leu Leu Phe Pro Ile Phe Leu Leu His 1 5 10 15 Ser Ala Ser Ser Met Leu Ser His Thr Ser Thr Ile Val Gln Thr Asn 20 25 30 Lys Gln Thr Glu Glu Arg Lys Asp Gly Glu Phe Cys Asn Arg Ala Ala 35 40 45 Lys Ser Gln Ser Lys Gln Glu Glu Val Glu Gly Thr Lys Thr Asn Lys · 50 55 60 Gln Arg Cys Leu Asp Tyr Ser Thr Val Asp Met Pro Ser Ile Leu Ala 65 70 75 80 Cys Ala Pro Leu Ser Ile Thr Gly His Asn Ser Glu Glu Val Gln Ile 85 . 90 95 Lys Trp Cys Leu Phe Val Cys Xaa 100 · <210> 1444 <211> 88 <212> PRT <213> Homo sapiens <400> 1444 Met Trp Gly Glu Pro Gly Gly Arg Val Ser Ala Leu Ala Gln Val Ser í 15 1 -5 10 Ala Gly Tyr Ala Pro Ser Gly Ser Gln Lys Cys Phe Leu Gln Gly Leu 20 25 30

Arg Val Leu Leu Val Val Gln Leu Ser Ala Pro His Leu Cys Pro • 35 40 45 Asn Pro Asn Ser Cys Gln Val Leu Ala Ser Tyr Phe Ser Cys Leu Tyr 50 55 60 Ser Tyr Trp Asp Thr Ile Glu Ser Pro Arg Ala Val Gly Ser His Leu 65 70 . 75 80 Arg Gly Arg Tyr Ile Gly Ser Ser 85 <210> 1445 <211> 64 <212> PRT <213> Homo sapiens <400> ·1445 Ser Gln Arg Ser Gly Arg Leu Arg Gln Glu Asp His Leu Arg Ser Gly 1 5 . 10 · 15 Val Gln Cys Gly Gln His Ser Lys Thr Leu Ser Leu Gln Lys Asn Leu 20 25 30 Lys Leu Ser Trp His Trp Trp Arg Met Ala Val Val Pro Ala Thr Trp 35 40 45 . • Glu Val Glu Val Gly Gly Ser Leu Glu Pro Arg Ser Ser Ser Leu Gln 50 55 60 . <210> 1446 <211> 88 <212> PRT <213> Homo sapiens <400> 1446 Met Trp Gly Glu Pro Gly Gly Arg Val Ser Ala Leu Ala Gln Val Ser 1 5 10 15 . Ala Gly Tyr Ala Pro Ser Gly Ser Gln Lys Cys Phe Leu Gln Gly Leu 20 25 30 Arg Val Leu Leu Val Val Gln Leu Ser Ala Pro His Leu Cys Pro 35 40 45 Asn Pro Asn Ser Cys Gln Val Leu Ala Ser Tyr Phe Ser Cys Leu Tyr 50 55 60 Ser Tyr Trp Asp Thr Ile Glu Ser Pro Arg Ala Val Gly Ser His Leu 65 70 · . 75 80 Arg Gly Arg Tyr Ile Gly Ser Ser

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<210> 1447 <211> 82 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (61) <223> Xaa equals any of the naturally occurring L-amino acids • . <400> 1447 Met Ala Ser His Ser Phe Leu Leu Asp Ile Tyr Leu Val Leu Ser Leu 1 5 10 15 Trp Lys Cys Ile Pro Gly Leu Val Gln Asp Val Phe Leu Glu Met Lys 20 25 30 Val Leu Thr Glu Ser Ala Leu Cys Lys Val Met Thr Leu Glu Pro Leu 35 . • 40 45 Gln His Ser Val Leu Val Phe Arg Cys Trp Gln Ser Xaa Phe Gln Ala 50 55 . 60 . Lys Ser Ser Arg Pro Cys Gln Ala Ser Ile Phe Ala Tyr Tyr Thr Leu 70 65 75 80 Asn Phe • . ( <210> 1448 <211> 82 <212> PRT <213> Homo sapiens <400> 1448 Met Ala Ser His Ser Phe Leu Leu Asp Ile Tyr Leu Val Leu Ser Leu. 1 5 10 15 Trp Lys Cys Ile Pro Gly Leu Val Gln Asp Val Phe Leu Glu Met Lys 20 25 30 Val Leu Thr Glu Ser Ala Leu Cys Lys Val Met Thr Leu Glu Pro Leu 35 40 45 Gln His Ser Val Leu Val Phe Arg Cys Trp Gln Ser Pro Phe Gln Ala 55 50 60 Lys Ser Ser Arg Pro Cys Gln Ala Ser Ile Phe Ala Tyr Tyr Thr Leu 65 70 · 75 80 Asn Phe

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## 215 220

Tyr Ile 225

<210> 1454 <211> 302 <212> PRT <213> Homo sapiens <400> 1454 Met Leu Val Thr Asn Arg Pro Gly Val Leu Lys Glu Pro Lys Leu Met 1 5 , 10 15 Gly Ala Ile Ser Phe Phe Ile Phe Phe Phe Thr Leu Leu Val Leu Ala 20 25 . 30 Arg Gln Asn Glu Tyr Tyr Cys Arg Leu Asp Phe Leu Trp Lys Lys Lys 35 · 40 45 Leu Arg Gln Glu Arg Glu Glu Thr Glu Thr Met Glu Asn Leu Thr Arg 50 55 60 Leu Leu Glu Asn Val Leu Pro Ala His Val Ala Pro Gln Phe Ile 65 70 75 80 Gly Gln Asn Arg Arg Asn Glu Asp Leu Tyr His Gln Ser Tyr Glu Cys 85 90 95 Val Cys Val Leu Phe Ala Ser Val Pro Asp Phe Lys Glu Phe Tyr Ser 100 105 110 Glu Ser Asn Ile Asn His Glu Gly Leu Glu Cys Leu Arg Leu Leu Asn 115 120 . 125 . Glu Ile Ile Ala Asp Phe Asp Glu Leu Leu Ser Lys Pro Lys Phe Ser 130 135 140 Gly Val Glu Lys Ile Lys Thr Ile Gly Ser Thr Tyr Met Ala Ala Thr 145 150 155 160 Gly Leu Asn Ala Thr Ser Gly Gln Asp Ala Gln Gln Asp Ala Glu Arg 165 170 175 Ser Cys Ser His Leu Gly Thr Met Val Glu Phe Ala Val Ala Leu Gly 180 185 190 Ser Lys Leu Asp Val Ile Asn Lys His Ser Phe Asn Asn Phe Arg Leu 195 200 . 205 Arg Val Gly Leu Asn His Gly Pro Val Val Ala Gly Val Ile Gly Ala 210 215 220 Gln Lys Pro Gln Tyr Asp Ile Trp Gly Asn Thr Val Asn Val Ala Ser 225 230 . 235 240 Arg Met Glu Ser Thr Gly Val Leu Gly Lys Ile Gln Val Thr Glu Glu - 255 245 250

Thr Ala Trp Ala Leu Gln Ser Leu Gly Tyr Thr Cys Tyr Ser Arg Gly 260 265 270 Val Ile Lys Val Lys Gly Lys Gly Gln Leu Cys Thr Tyr Phe Leu Asn 275 280 285 Thr Asp Leu Thr Arg Thr Gly Pro Pro Ser Ala Thr Leu Gly 290 295 300 . <210> 1455 <211> 76 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1455 Met Gly Pro Phe Phe Pro Tyr Ser Leu Leu Xaa Phe Phe Pro Cys Ser <u>`</u>5 10 1 15 Phe Ser Ser Pro Ser Phe Ile Phe Leu Leu Leu Ile Leu Lys Thr Gly 20 25 30 Cys Ser Leu Phe Pro Cys Cys Pro Ile Ser Pro Leu Cys Pro Tyr Phe 35 40 45 Ser Gln Ser Leu Ser Pro Leu Lys Ser Arg Ala Gly Arg Cys Tyr Trp 50 55 60 Cys Phe Phe Thr Leu Gly Pro Ser Ser Tyr Leu Leu 65 70 75 <210> 1456 <211> 61 <212> PRT <213> Homo sapiens <400> 1456 Thr Leu Thr Gln His Gln Gly Ala His Leu Gly Pro Phe Leu Asp Met 5 1 10 15 Ser Phe Leu His Tyr His Ser His Glu Pro Pro Thr Ser Gly Ile Ala 20 . 25 30 Asp Gln Gly Trp Gly Glu Asn Val Ala Cys Cys Phe Leu Val Leu Val 35. . 40 45 Ile Ile Tyr Leu Asn Lys Gln Cys Cys Lys Tyr Leu Pro 55 50 60

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<210> 1457 · <211> 110 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1457 Met Arg Leu Ser Cys Pro Arg Xaa Pro Gly Trp Met Gly Pro Phe Phe 5 1 10 15 Pro Tyr Ser Leu Leu Ser Phe Phe Pro Cys Ser Phe Ser Ser Pro Ser 20 25 30 Phe Ile Phe Leu Leu Leu Leu Lys Thr Gly Cys Ser Leu Phe Pro 35 40 45 Cys Cys Pro Ile Ser Pro Leu Cys Pro Tyr Phe Ser Gln Ser Leu Ser 50 55 60 Pro Leu Lys Ser Arg Ala Gly Arg Cys Tyr Trp Cys Phe Phe Thr Leu . 70 65 75 80 Gly Pro Ser Ser Ile Phe Val Phe Ser Val Tyr Pro Leu Pro Asp Thr 85 . 90 95 Ser Phe Ser Pro Ser Leu Gly Pro Lys Ala Glu Asn Gln Cys 100 105 110 · <210> 1458 <211> 99 <212> PRT <213> Homo sapiens • • <400> 1458 Met Gly Pro Phe Phe Pro Tyr Ser Leu Leu Ser Phe Phe Pro Cys Ser 1 5 10 15 Phe Ser Ser Pro Ser Phe Ile Phe Leu Leu Leu Ile Leu Lys Thr Gly 20 25 30 Cys Ser Leu Phe Pro Cys Cys Pro Ile Ser Pro Leu Cys Pro Tyr Phe 35 40 45 . Ser Gln Ser Leu Ser Pro Leu Lys Ser Arg Ala Gly Arg Cys Tyr Trp 50 . 55 60 Cys Phe Phe Thr Leu Gly Pro Ser Ser Ile Phe Val Phe Ser Val Tyr 65 70 75 80 Pro Leu Pro Asp Thr Ser Phe Ser Pro Ser Leu Gly Pro Lys Ala Glu 85 · 90 95

Asn Gln Cys

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Thr Gly

<210> 1461 <211> 33 <212> PRT <213> Homo sapiens <400> 1461 Met Leu Val Leu Val Ser Gly Ile Ile Phe Ser Leu Ala Asp Arg Ser 1 5 10 15 Ser Ser Ser Thr Ile Arg Met Asp Ala Leu Ala Phe Leu Gln Gly Leu 20 25 30 Leu <210> 1462 <211> 89 <212> PRT <213> Homo sapiens <400> 1462 Met Leu Val Leu Val Ser Gly Ile Ile Phe Ser Leu Ala Asp Arg Ser 1 5 10 • 15 Ser Ser Ser Thr Ile Arg Met Asp Ala Leu Ala Phe Leu Gln Gly Leu 20 25 30 Leu Gly Thr Glu Pro Ala Glu Ala Phe His Pro His Leu Pro Ile Leu . 35 40 45 Leu Pro Pro Val Met Ala Cys Val Ala Asp Pro Phe Tyr Lys Ile Ala 50 55 60 Ala Arg Gly Pro Gly Gly Ala Ala Gly Ala Gly Ala Gly Pro Val Ala 75. 65 70 80 Ala Ala Gln Ala Ser Asp Ala Gly Ser 85 <210> 1463 . <211> 125 <212> PRT <213> Homo sapiens <400> 1463 Met Tyr Phe Ile Phe Thr Ser Phe Trp Ala Tyr Lys Ile Tyr Tyr Val 5 1 10 15 Tyr Gly Phe Met Met Leu Val Leu Val Ile Leu Cys Ile Val Thr Val 20 25 30 Cys Val Thr Ile Val Cys Thr Tyr Phe Leu Leu Asn Ala Glu Asp Tyr 35. 40 45 · Arg Trp Gln Trp Thr Ser Phe.Leu Ser Ala Ala Ser Thr Ala Ile Tyr

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· 50 55 60 Val Tyr Met Tyr Ser Phe Tyr Tyr Tyr Phe Phe Lys Thr Lys Met Tyr 65 70 75 . 80 . Gly Leu Phe Gln Thr Ser Phe Tyr Phe Gly Tyr Met Ala Val Phe Ser 85 90 95 Thr Ala Leu Gly Ile Met Cys Gly Ala Ile Gly Tyr Met Gly Thr Ser 110 100 105 Ala Phe Val Arg Lys Ile Tyr Thr Asn Val Lys Ile Asp 120 115 • 125 . <210> 1464 <211> .125 <212> PRT <213> Homo sapiens <400> 1464 Met Tyr Phe Ile Phe Thr Ser Phe Trp Ala Tyr Lys Ile Tyr Tyr Val 1 5 10 15 Tyr Gly Phe Met Met Leu Val Leu Val Ile Leu Cys Ile Val Thr Val 20 25 3.0 Cys Val Thr Ile Val Cys Thr Tyr Phe Leu Leu Asn Ala Glu Asp Tyr 40 35 45 Arg Trp Gln Trp Thr Ser Phe Leu Ser Ala Ala Ser Thr Ala Ile Tyr 55 50 60 Val Tyr Met Tyr Ser Phe Tyr Tyr Tyr Phe Phe Lys Thr Lys Met Tyr 65 70 75 80 Gly Leu Phe Gln Thr Ser Phe Tyr Phe Gly Tyr Met Ala Val Phe Ser 85 90 95 Thr Ala Leu Gly Ile Met Cys Gly Ala Ile Gly Tyr Met Gly Thr Ser 100 105 110 Ala Phe Val Arg Lys Ile Tyr Thr Asn Val Lys Ile Asp 125 . 115 120 <210> 1465 <211> 250 <212> PRT <213> Homo sapiens <400> 1465 Met Arg Gly Thr Pro Lys Thr His Leu Leu Ala Phe Ser Leu Leu Cys 1 5 . 15 10 Leu Leu Ser Lys Val Arg Thr Gln Leu Cys Pro Thr Pro Cys Thr Cys 20 25 30

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Pro Trp Pro Pro Pro Arg Cys Pro Leu Gly Val Pro Leu Val Leu Asp Gly Cys Gly Cys Cys Arg Val Cys Ala Arg Arg Leu Gly Glu Pro Cys Asp Gln Leu His Val Cys Asp Ala Ser Gln Gly Leu Val Cys Gln Pro Gly Ala Gly Pro Gly Gly Arg Gly Ala Leu Cys Leu Leu Ala Glu Asp Asp Ser Ser Cys Glu Val Asn Gly Arg Leu Tyr Arg Glu Gly Glu Thr Phe Gln Pro His Cys Ser Ile Arg Cys Arg Cys Glu Asp Gly Gly Phe Thr Cys Val Pro Leu Cys Ser Glu Asp Val Arg Leu Pro Ser Trp Asp Cys Pro His Pro Arg Arg Val Glu Val Leu Gly Lys Cys Pro Glu Trp Val Cys Gly Gln Gly Gly Gly Leu Gly Thr Gln Pro Leu Pro Ala 175 · Gln Gly Pro Gln Phe Ser Gly Leu Val Ser Ser Leu Pro Pro Gly Val . 185 Pro Cys Pro Glu Trp Ser Thr Ala Trp Gly Pro Cys Ser Thr Thr Cys Gly Leu Gly Met Ala Thr Arg Val Ser Asn Gln Asn Arg Phe Cys Arg Leu Glu Thr Gln Arg Arg Leu Cys Leu Ser Arg Pro Cys Pro Pro Ser 235 · . Arg Gly Arg Ser Pro Gln Asn Ser Ala Phe · 250 <210> 1466 <211> 250 <212> PRT <213> Homo sapiens <400> 1466 Met Arg Gly Thr Pro Lys Thr His Leu Leu Ala Phe Ser Leu Leu Cys . . Leu Leu Ser Lys Val Arg Thr Gln Leu Cys Pro Thr Pro Cys Thr Cys Pro Trp Pro Pro Pro Arg Cys Pro Leu Gly Val Pro Leu Val Leu Asp • Gly Cys Gly Cys Cys Arg Val Cys Ala Arg Arg Leu Gly Glu Pro Cys

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50	5	55 .	60	
Asp Gln Leu 65	His Val Cys As 70	sp Ala Ser Gl	n Gly Leu Val ( .75	Cys Gln Pro 80
Gly Ala Gly	Pro Gly Gly Ar 85	g Gly Ala Le 9	-	Ala Glu Asp 95
Asp Ser Ser	Cys Glu Val As 100	sn Gly Arg Les 105		Gly Glu Thr 110
Phe Gln Pro 115	His Cys Ser Il	e Arg Cys Ar 120	g Cys Glu Asp ( 125 .	Gly Gly Phe
Thr Cys Val 130	Pro Leu Cys Se 13		l Arg Leu Pro : 140	Ser Trp Asp
Cys Pro His 145	Pro Arg Arg Va 150	al Glu Val Lee	u Gly Lys Cys ( 155	Cys Pro Glu 160
Trp Val Cys	Gly Gln Gly Gl 165	y Gly Leu Gly. 17		Leu Pro Ala 175
Gln Gly Pro	Gln Phe Ser Gl 180	y Leu Val Se: 185		Pro Gly Val 190
Pro Cys Pro 195	Glu Trp Ser Th	nr Ala Trp Gly 200	y Pro Cys Ser 2 205	Ihr Thr Cys
Glý Leu Gly 210	Met Ala Thr Ar 21		n Gln Asn Arg 1 220	Phe Cys Arg
Leu Glu Thr 225	Gln Arg Arg Le 230	eu Cys Leu Se:	r Arg Pro Cys 1 235	Pro Pro Ser 240
Arg Gly Arg	Ser Pro Gln As 245	n Ser Ala Pho 25		•

<210> 1467 <211> 388 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (277) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1467 Met Met Thr Ile Thr Phe Leu Pro Tyr Thr Phe Ser Leu Met Val Thr 1 5 10 15 Phe Pro Asp Val Pro Leu Gly Ile Phe Leu Phe Cys Val Cys Val Ile 20 25 30 • Ala Ile Gly Val Val Gln Ala Leu Ile Val Gly Tyr Ala Phe His Phe 35 45 40 .

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Pro His Leu Leu Ser Pro Gln Ile Gln Arg Ser Ala His Arg Ala Leu .50 Tyr Arg Arg His Val Leu Gly Ile Val Leu Gln Gly Pro Ala Leu Cys Phe Ala Ala Ala Ile Phe Ser Leu Phe Phe Val Pro Leu Ser Tyr Leu Leu Met Val Thr Val Ile Leu Leu Pro Tyr Val Ser Lys Val Thr Gly Trp Cys Arg Asp Arg Leu Leu Gly His Arg Glu Pro Ser Ala His Pro Val Glu Val Phe Ser Phe Asp Leu His Glu Pro Leu Ser Lys Glu Arg . Val Glu Ala Phe Ser Asp Gly Val Tyr Ala Ile Val Ala Thr Leu Leu Ile Leu Asp Ile Cys Glu Asp Asn Val Pro Asp Pro Lys Asp Val Lys . 175 Glu Arg Phe Ser Gly Ser Leu Val Ala Ala Leu Ser Ala Thr Gly Pro Arg Phe Leu Ala Tyr Phe Gly Ser Phe Ala Thr. Val Gly Leu Leu Trp . Phe Ala His His Ser Leu Phe Leu His Val Arg Lys Ala Thr Arg Ala . 210 Met Gly Leu Leu Asn Thr Leu Ser Leu Ala Phe Val Gly Gly Leu Pro Leu Ala Tyr Gln Gln Thr Ser Ala Phe Ala Arg Gln Pro Arg Asp Glu . Leu Glu Arg Val Arg Val Ser Cys Thr Ile Ile Phe Leu Ala Ser Ile Phe Gln Leu Ala Xaa Trp Thr Thr Ala Leu Leu His Gln Ala Glu Thr Leu Gln Pro Ser Val Trp Phe Gly Gly Arg Glu His Val Leu Met Phe Ala Lys Leu Ala Leu Tyr Pro Cys Ala Ser Leu Leu Ala Phe Ala Ser Thr Cys Leu Leu Ser Arg Phe Ser Val Gly Ile Phe His Leu Met Gln 335 -Ile Ala Val Pro Cys Ala Phe Leu Leu Leu Arg Leu Leu Val Gly Leu • Ala Leu Ala Thr Leu Arg Val Leu Arg Gly Leu Ala Arg Pro Glu His . 365

#### WO 01/77137 PCT/US01/11988 Pro Pro Ala Pro Thr Gly Gln Asp Asp Pro Gln Ser Gln Leu Leu . 375 370 380 ۰. Pro Ala Pro Cys 385 <210> 1468 <211> 388 <212> PRT <213> Homo sapiens • <400> 1468 Met Met Thr Ile Thr Phe Leu Pro Tyr Thr Phe Ser Leu Met Val Thr 1 5 10 • 15 Phe Pro Asp Val Pro Leu Gly Ile Phe Leu Phe Cys Val Cys Val Ile 20 25 30 Ala Ile Gly Val Val Gln Ala Leu Ile Val Gly Tyr Ala Phe His Phe . 35 40 45 Pro His Leu Leu Ser Pro Gln Ile Gln Arg Ser Ala His Arg Ala Leu 50 . 55 60 . . Tyr Arg Arg His Val Leu Gly Ile Val Leu Gln Gly Pro Ala Leu Cys 70 75 80 Phe Ala Ala Ala Ile Phe Ser Leu Phe Phe Val Pro Leu Ser Tyr Leu 85 90 95 Leu Met Val Thr Val Ile Leu Leu Pro Tyr Val Ser Lys Val Thr Gly 100 105 110 Trp Cys Arg Asp Arg Leu Leu Gly His Arg Glu Pro Ser Ala His Pro 115 120 . 125 Val Glu Val Phe Ser Phe Asp Leu His Glu Pro Leu Ser Lys Glu Arg 130 . 135 140 Val Glu Ala Phe Ser Asp Gly Val Tyr Ala Ile Val Ala Thr Leu Leu 145 ·150 155 160 Ile Leu Asp Ile Cys Glu Asp Asn Val Pro Asp Pro Lys Asp Val Lys 165 170 175 Glu Arg Phe Ser Gly Ser Leu Val Ala Ala Leu Ser Ala Thr Gly Pro 180 185 190 Arg Phe Leu Ala Tyr Phe Gly Ser Phe Ala Thr Val Gly Leu Leu Trp 195 200 205 . Phe Ala His His Ser Leu Phe Leu His Val Arg Lys Ala Thr Arg Ala 210 215 220 Met Gly Leu Asn Thr Leu Ser Leu Ala Phe Val Gly Gly Leu Pro 235 225 230 240 Leu Ala Tyr Gln Gln Thr Ser Ala Phe Ala Arg Gln Pro Arg Asp Glu

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	245	250		255
Leu Glu Arg Val 260	Arg Val Ser	Cys Thr Ile 1 265	lle Phe Leu Ala · 270	Ser Ile
Phe Gln Leu Ala 275	Met Trp Thr	Thr Ala Leu I 280.	Leu His Gln Ala 285	Glu Thr
Leu Gln Pro Ser 290	Val Trp Phe 295		Glu His Val Leu 300	Met Phe .
Ala Lys Leu Ala 305	Leu Tyr Pro 310		Leu Leu Ala Phe 315	Ala Ser 320
Thr Cys Leu Leu	Ser Arg Phe 325	Ser Val Gly 1 330	lle Phe His Leu	Met Gln 335
Ile Ala Val Pro 340	Cys Ala Phe	Leu Leu Leu A . 345	Arg Leu Leu Val 350	Gly Leu
Ala Leu Ala Thr 355	Leu Arg Val	Leu Arg Gly I 360	Leu Ala Arg Pro 365	Glu His
Pro Pro Pro Ala 370	Pro Thr Gly 375		Pro Gln Ser Gln 380	Leu Leu '
Pro Ala Pro Cys 385				
			•	
<210> 1469 <211> 262 <212> PRT		· ·		
<213> Homo sapie	ens		· .	
<220> <221> SITE <222> (231)				
<223> Xaa equals	s any of the	naturally occ	curring L-amino	acids
<400> 1469 Met Ser Pro Pro 1	Pro Leu Leu 5	Gln Pro Leu I 10	eu Leu Leu Leu	Pro Leu 15
Leu Asn Val Glu 20	Pro Ser Gly	Ala Thr Leu 1 25	tle Arg Ile Pro 30	Leu His
Arg Val Gln Pro 35	Gly Arg Arg	Ile Leu Asn I 40	Leu Arg Gly 45	Trp Arg
Glu Pro Ala Glu 50	Leu Pro Lys 55		Pro Ser Pro Gly 60	Asp Lys
Pro Ile Phe Val		Acn Ther Are i		-1 -7
65	Pro Leu Ser 70	ASIL IYI ALY P	Asp Val Gln Tyr 75	Phe Gly 80

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	Thr	Gly	Ser	Ser 100	Asn	Leu	Trp	Val	Pro 105	Ser	Arg	Arg	Cys	His 110	Phe	Phe
	Ser	Val	Pro 115	Cys	Trp	Leu	His	His 120	Arg	Phe	Asp	Pro	Lys 125	Ala	Ser ,	Ser
	Ser	Phe 130	Gln	Ala	Asn	Gly	Thr 135	Lys	Phe	Ala	Ile	Gln 140	Tyr	Gly	Thr	Gly
•	Arg 145	Val	Asp	Gly	Ile	Leu 150'		Glu	Asp	Lys	Leu 155	Thr	Ile	Gly	Gly	Ile 160
	Lys	Gly	Ala	Ser	Val 165	Ile	Phe	Gly	Glu	Ala 170	Leu	Trp	Glu	Pro	Ser 175	Leu
	Val	Phe	Ala	Phe 180	Ala	His	Phe	Asp	Gly 185	Ile	Leu	Gly	Leu	Gly 190	Phe	Pro
	Ile	Leu	Ser 195	Val	Glu	Gly	Val	Arg 200	Pro	Pro	Met	Asp	Val 205	Leu	Val	Glu
	Gln	Gly 210	Leu	Leu	Asp	Lys	Pro 215	Val	Phe	Ser	Phe	Tyr 220	Lėu	Asn	Arg	Asp
	Pro 225	Glu	Glu	Pro	Asp	Gly 230	Xaa	Glu	Leu	Val	Leu 235	Gly	Gly	Ser	Asp	Pro 240
	Ala	His	Tyr <sub>.</sub>	Ile	Pro 245	Pro	Ser	Pro	Phe	Val 250	Pro	Val	Arg	Ser	Pro 255	Pro
	Met	Ala	Asp	Pro 260	Gln	Gly										
	<211 <212	)> 14 L> 14 2> PF 3> Ho	15 RT	sapie	ens			.•								
•		)> 14 Ser		Pro	Pro 5	Leu	Leu	Gln	Pro	Leu 10	Leu	Leu	Leu	Leu	Pro 15	Leu
	Leu	Asn	Val	Glu 20		Ser	Gly	Ala	Thr 25	Leu	Ile	Arg	Ile	Pro 30	Leu	His
	Arg	Val	Gln 35	Pro	Gly	Arg	Arg	Ile 40	Leu	Asn	Leu	Leu	Arg 45	Gly	Trp	Arg
	Glu	Pro 50	Ala	Glu	Leu	Pro	Lys 55	Leu	Gly	Ala	Pro	Ser 60	Pro	Gly	Asp	Lys

ProIlePheValProLeuSerAsnTyrArgAspValGlnTyrPheGly657070757580GluIleGlyLeuGlyThrProProGlnAsnPheThrValAlaPheAsp85909095909595

Thr Gly Ser Ser Asn Leu Trp Val Pro Ser Arg Arg Cys His Phe Phe

100 105 110 Ser Val Pro Cys Trp Leu His His Arg Phe Asp Pro Lys Ala Ser Ser 115 120 · 125 Ser Phe Arg Pro Met Gly Pro Ser Leu Pro Phe Asn Met Glu Leu Gly 130 135 140 Gly <sup>`</sup> 145 . <210> 1471 <211> 212 <212> PRT <213> Homo sapiens <220> <221> SITE · <222> (9) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1471 Gly Ser Ala Gly Thr Ala Arg Ile Xaa Gly Ser Thr Thr Arg Pro Asp 5 1 , . 10 15 Pro Glu Glu Pro Asp Gly Gly Glu Leu Val Leu Gly Gly Ser Asp Pro 20 . 25 30 Ala His Tyr Ile Pro Pro Leu Thr Phe Val Pro Val Thr Val Pro Ala 35 40 45 Tyr Trp Gln Ile His Met Glu Arg Val Lys Val Gly Pro Gly Leu Thr 50 55 60 Leu Cys Ala Lys Gly Cys Ala Ala Ile Leu Asp Thr Gly Thr Ser Leu 70 75 80 Ile Thr Gly Pro Thr Glu Glu Ile Arg Ala Leu His Ala Ala Ile Gly 85 • 90 95 Gly Ile Pro Leu Leu Ala Gly Glu Tyr Ile Ile Leu Cys Ser Glu Ile 100 105 110 Pro Lys Leu Pro Ala Val Ser Phe Leu Leu Gly Gly Val Trp Phe Asn . 115 120 125 Leu Thr Ala His Asp Tyr Val Ile Gln Thr Thr Arg Asn Gly Val Arg 130 135 140 Leu Cys Leu Ser Gly Phe Gln Ala Leu Asp Val Pro Pro Pro Ala Gly 145 · 150 155 160 Pro Phe Trp Ile Leu Gly Asp Val Phe Leu Gly Thr Tyr Val Ala Val -165 170 175 . Phe Asp Arg Gly Asp Met Lys Ser Ser Ala Arg Val Gly Leu Ala Arg 180 . 1.85 190

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Ala Arg Thr Arg Gly Ala Asp Leu Gly Trp Gly Glu Thr Ala Gln Ala 195 200 205 Gln Phe Pro Gly 210 <210> 1472 . <211> 150 <212> PRT <213> Homo sapiens <400> 1472 Met Val Met Ile Leu Phe Val Ala Phe Ile Thr Cys Trp Glu Glu Val 1 5 10 15 Thr Thr Leu Val Gln Ala Ile Arg Ile Thr Ser Tyr Met Asn Glu Thr 20 25 . 30 Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg Ser 35 40 45 Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr Trp 50 55 60 Leu Pro Phe Val Leu Leu Gln Val Ile Ile Val Leu Leu Lys Val Gln - ′ . 65 70 75 80 Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val Asn 85 . 90 . 95 Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu Asn 100 105 . 110 Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys Cys 115 . 120 125 Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys Pro 130 135 140 Ile Ser Ile Met Ile Cys 145 1.50 -<210> 1473 <211> 150 <212> PRT <213> Homo sapiens <400> 1473 Met Val Met Ile Leu Phe Val Ala Phe Ile Thr Cys Trp Glu Glu Val 5 . 10 1 15 Thr Thr Leu Val Gln Ala Ile Arg Ile Thr Ser Tyr Met Asn Glu Thr 20 25 30 Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg Ser 35 40 45

Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr Trp 50 55 <sup>·</sup> 60 Leu Pro Phe Val Leu Leu Gln Val Ile Ile Val Leu Leu Lys Val Gln 65 70 75 80 Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val Asn 85 90 95 Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu Asn 100 . . 105 • 110 Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys Cys 115 120 125 Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys Pro 135 130 140 Ile Ser Ile Met Ile Cys 145 150 . ÷ <210> 1474 <211> 353 <212> PRT <213> Homo sapiens <400> 1474 Met Arg Tyr Leu Leu Pro Ser Val Val Leu Leu Gly Thr Ala Pro Thr 1 5 10 · 15 Tyr Val Leu Ala Trp Gly Val Trp Arg Leu Leu Ser Ala Phe Leu Pro 20 25 30 Ala Arg Phe Tyr Gln Ala Leu Asp Asp Arg Leu Tyr Cys Val Tyr Gln 35 . 40 45 Ser Met Val Leu Phe Phe Phe Glu Asn Tyr Thr Gly Val Gln Ile Leu 5.0 55 60 Leu Tyr Gly Asp Leu Pro Lys Asn Lys Glu Asn Ile Ile Tyr Leu Ala 65 · 70 75 80 Asn His Gln Ser Thr Val Asp Trp Ile Val Ala Asp Ile Leu Ala Ile · 95 85 90 Arg Gln Asn Ala Leu Gly His Val Arg Tyr Val Leu Lys Glu Gly Leu 100 105 110 Lys Trp Leu Pro Leu Tyr Gly Cys Tyr Phe Ala Gln His Gly Gly Ile . 115 120 · 125 Tyr Val Lys Arg Ser Ala Lys Phe Asn Glu Lys Glu Met Arg Asn Lys 130 · 135 140 Leu Gln Ser Tyr Val Asp Ala Gly Thr Pro Met Tyr Leu Val Ile Phe 155 145 150 . 1.60

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Pro Glu Gly Thr Arg Tyr Asn Pro Glu Gln Thr Lys Val Leu Ser Ala 165 170 175 Ser Gln Ala Phe Ala Ala Gln Arg Gly Leu Ala Val Leu Lys His Val 185 180 190 Leu Thr Pro Arg Ile Lys Ala Thr His Val Ala Phe Asp Cys Met Lys 195 200 205 Asn Tyr Leu Asp Ala Ile Tyr Asp Val Thr Val Val Tyr Glu Gly Lys 210 215 220 Asp Asp Gly Gly Gln Arg Arg Glu Ser Pro Thr Met Thr Glu Phe Leu 230 225 235 240 Cys Lys Glu Cys Pro Lys Ile His Ile His Ile Asp Arg Ile Asp Lys 245 250 255 Lys Asp Val Pro Glu Glu Gln Glu His Met Arg Arg Trp Leu His Glu 260 . 265 270 Arg Phe Glu Ile Lys Asp Lys Met Leu Ile Glu Phe Tyr Glu Ser Pro 275 280 285 Asp Pro Glu Arg Arg Lys Arg Phe Pro Gly Lys Ser Val Asn Ser Lys 290 295 300 . Leu Ser Ile Lys Lys Thr Leu Pro Ser Met Leu Ile Leu Ser Gly Leu 305 310 315 320 Thr Ala Gly Met Leu Met Thr Asp Ala Gly Arg Lys Leu Tyr Val Asn 325 330 335 . . Thr Trp Ile Tyr Gly Thr Leu Leu Gly Cys Leu Trp Val Thr Ile Lys 340 345 350 Ala <210> 1475 <211> 353 <212> PRT <213> Homo sapiens <400> 1475 Met Arg Tyr Leu Leu Pro Ser Val Val Leu Leu Gly Thr Ala Pro Thr 1 - 5 · 10 . 15 Tyr Val Leu Ala Trp Gly Val Trp Arg Leu Leu Ser Ala Phe Leu Pro 20 25 30 Ala Arg Phe Tyr Gln Ala Leu Asp Asp Arg Leu Tyr Cys Val Tyr Gln '35 40 45 Ser Met Val Leu Phe Phe Phe Glu Asn Tyr Thr Gly Val Gln Ile Leu . 50 55 60 Leu Tyr Gly Asp Leu Pro Lys Asn Lys Glu Asn'Ile Ile Tyr Leu Ala

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65					70		•			75					80
Asn	His	Gln	Ser	Thr 85	Val	Asp	Trp	Ile	Val 90	Ala	Asp	Ile	Leu	Ala 95	Ile
Arg	Gln	Asn	Ala 100	Leu	Gly	His	Val	Arg 105	Tyr	Val	Leu	Lys	Glu 110	Gly	Leu
Lys	Trp	Leu 115	Pro	Leu	Tyr	Gly	Cys 120	Tyr	Phe	Ala	Gln	His 125	Gly	Gly	Ile
Tyr	Val 130	Lys	Arg	Ser	Ala	Lys 135	Phe	Asn	Glu	Lys	Glu 140	Met	Arg	Asn	Lys
Leu 145	Gln	Ser	Tyr	Val	Asp 150	Ala	Gly	Thr	Pro	Met 155	Tyr	Leu	Val	Ile	Phe 160
Pro	Glu	Gly	Thr	Arg 165	Tyr	Asn	Pro	Glu	Gln 170	Thr	Lys	Val	Leu	Ser 175	Ala
Ser	Gln	Ala	Phe 180	Ala	Ala	Gln	Arg	Gly 185	Leu	Ala	Val	Leu	Lys 190	His	Val
Leu	Thr	Pro 195	Arg	Ile	Lys	Ala	Thr 200	His	Val	Ala	Phe	Asp 205	Cys	Met	Lys
Asn	Tyr 210	Leu	Asp	Ala	Ile	Tyr 215	Asp	Val	Thr	Val	Val 220	Tyr	Glu	Gly	Lys
Asp 225	Asp	Gly	Gly	Gln	Arg 230	Arg	Glu	Ser	Pro	Thr 235	Met	Thr	Glu	Phe	Leu 240
Cys	Lys	Glu	Cys -	Pro 245	Lys	Ile	His	Ile	His 250	Ile	Asp	Arg	Ile	Asp 255	Lys
Lys	Asp	Val	Prö 260	Glu	Glu	Gln	Glu	His 265	Met	Arg	Arg	Trp	Leu 270	His	Glu
		275		Lys		•	280					285			
Asp	Pro 290	Glu	Arg	Arg	Lys	Arg 295	Phe	Pro	Gly	Lys	Ser 300	Val	Asn	Ser	Lys
305				Lys	310					315					320
Thr	Ala	Gly	Met	Leu 325	Met	Thr	Asp	Ala	Gly 330	Arg	Lys	Leu	Tyr	Val 335	Asn
Thr	Trp	Ile	Tyr 340	Gly	Thr	Leu	Leu	Gly 345	Cys	Leu	Trp	Val	Thr 350	Ile	Lys · ·

Ala

<210> 1476 <211> 80

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<212> PRT <213> Homo sapiens <220> <221> SITE ' <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1476 Met Thr His Cys Leu Leu His Gly Met Gly Xaa Ala Gly Ala Ala Ser 5 1 . . 10 15 Leu Thr Pro Lys Pro Met Ser Leu Ile Ser Ala Tyr Cys Gly Gly Leu . 25 20 . 30 Trp Leu Ala Ala Val Ala Val Met Val Gln Met Ala Ala Leu Cys Gly 35 40 45 Ala Gln Asp Ile Gln Asp Lys Phe Ser Ser Ile Leu Ser Arg Gly Gln . 50 55 60 Glu Ala Tyr Glu Arg Leu Leu Trp Asn Gly Glu Phe Gly Glu Pro Lys 65 70 75 80 <210> 1477 <211> 415 <212> PRT <213> Homo sapiens <400> 1477 Val Gly Leu Val Ser Met Leu Gly Ile Pro Ile Pro Gly Ala Glu Gly · 5 1 10 15 Ala Pro Val Leu Asn Ser Leu Val Phe Leu Ser Gly Gln Ser Thr Pro 25 30 -20 Thr Gln Lys Gly Val Gly Ile Ala Gly Ala Val Cys Val Ser Ser Lys . 35 40 45 Leu Arg Pro Arg Gly Gln Cys Arg Leu Glu Phe Ser Leu Ala Trp Asp 50 55 . 60 Met Pro Arg Ile Met Phe Gly Ala Lys Gly Gln Val His Tyr Arg Arg . . 70 65 75 . 80 Tyr Thr Arg Phe Phe Gly Gln Asp Gly Asp Ala Ala Pro Ala Leu Ser 85 90 95 His Tyr Ala Leu Cys Arg Tyr Ala Glu Trp Glu Glu Arg Ile Ser Ala 100 . 105 110 Trp Gln Ser Pro Val Leu Asp Asp Arg Ser Leu Pro Ala Trp Tyr Lys 115 . 125 🦯 120 Ser Ala Leu Phe Asn Glu Leu Tyr Phe Leu Ala Asp Gly Gly Thr Val

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135 140 130 Trp Leu Glu Val Leu Glu Asp Ser Leu Pro Glu Glu Leu Gly Arg Asn 145 150 • 155 160 Met Cys His Leu Arg Pro Thr Leu Arg Asp Tyr Gly Arg Phe Gly Tyr 165 170 175 Leu Glu Gly Gln Glu Tyr Arg Met Tyr Asn Thr Tyr Asp Val His Phe · . 180 185 190 Tyr Ala Ser Phe Ala Leu Ile Met Leu Trp Pro Lys Leu Glu Leu Ser 195 200 205 . . Leu Gln Tyr Asp Met Ala Leu Ala Thr Leu Arg Glu Asp Leu Thr Arg 210 215 . 220 Arg Arg Tyr Leu Met Ser Gly Val Met Ala Pro Val Lys Arg Arg Asn 235 225 230 -240 Val Ile Pro His Asp Ile Gly Asp Pro Asp Asp Glu Pro Trp Leu Arg 245 250 . 255 Val Asn Ala Tyr Leu Ile His Asp Thr Ala Asp Trp Lys Asp Leu Asn 260 265 270 Leu Lys Phe Val Leu Gln Val Tyr Arg Asp Tyr Tyr Leu Thr Gly Asp 275 280 . 285 Gln Asn Phe Leu Lys Asp Met Trp Pro Val Cys Leu Ala Val Met Glu 290 295 : 300 Ser Glu Met Lys Phe Asp Lys Asp His Asp Gly Leu Ile Glu Asn Gly 310 315 320 Gly Tyr Ala Asp Gln Thr Tyr Asp Gly Trp Val Thr Thr Gly Pro Ser 325 330 335 Ala Tyr Cys Gly Gly Leu Trp Leu Ala Ala Val Ala Val Met Val Gln 340 345 350 Met Ala Ala Leu Cys Gly Ala Gln Asp Ile Gln Asp Lys Phe Ser Ser 355 360 365 Ile Leu Ser Arg Gly Gln Glu Ala Tyr Glu Arg Leu Leu Trp Asn Gly 370 375 . 380 · . Arg Tyr Tyr Asn Tyr Asp Ser Ser Ser Arg Pro Gln Ser Arg Ser Val 385 390 395 400 Met Ser Asp Gln Cys Ala Gly Gln Trp Phe Leu Lys Ala Cys Gly 405 410 415

<210> 1478 <211> 86 <212> PRT <213> Homo sapiens

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<220> <221> SITE <222> (75) <223> Xaa equals any of the naturally occurring L-amino acids . . <400> 1478 Met Ser Leu Gly Gly Ser Gln Ser Ser Leu Val Ser Trp Arg Ala Thr 1 10 15 .Gln Ile Ala Cys Met Thr Leu Ser Trp Pro Leu Trp Thr Cys Trp Leu 20 • 25 30 Ala Ala Pro Leu Ser Leu Thr Lys Ser Pro Trp Arg Gln Trp Ser Thr 35 40 45 His Val Lys Gly Phe Asn Leu Ala Ser Ser Gln Ala Glu Val Gln Pro 50 55 60 Val Gly Gln Thr Leu Ala Ser Glu Lys Lys Xaa Leu Gln Glu Val Leu 65 70 75 80 . Ala Arg Ala Ile Gln His 85 . <210> 1479 <211> 159 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (153) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (158) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1479 Met His Arg Leu Ile Phe Val Tyr Thr Leu Ile Cys Ala Asn Phe Cys 1 5 10 -15 Ser Cys Arg Asp Thr Ser Ala Thr Pro Gln Ser Ala Ser Ile Lys Ala 20 25 30 Leu Arg Asn Ala Asn Leu Arg Arg Asp Glu Ser Asn His Leu Thr Asp 35 40 . 45 Leu Tyr Arg Arg Asp Glu Thr Ile Gln Val Lys Gly Asn Gly Tyr Val 50 55 60 Gln Ser Pro Arg Phe Pro Asn Ser Tyr Pro Arg Asn Leu Leu Thr 65 70 • 75 80 Trp Arg Leu His Ser Gln Glu Asn Thr Arg Ile Gln Leu Val Val Asp 85 90 ·95 .

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Asn Gln Phe Gly Leu Glu Glu Ala Glu Asn Asp Ile Cys Arg Tyr Asp 100 105 110 Phe Val Glu Val Glu Asp Ile Ser Glu Thr Ser Thr Ile Ile Arg Gly 115 120 125 Arg Trp Cys Gly His Lys Glu Val Pro Pro Arg Ile Lys Ser Arg Thr 130 135 . 140 Asn His Ile Lys Ile Thr Phe Lys Xaa Asp Asp Tyr Phe Xaa Ala 145 . 150 155 <210> 1480 <211> 89 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (33) <223> Xaa equals any of the naturally occurring L-amino acids <22.0> <221> SITE <222> (63) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1480 Leu Ile Ile Lys Lys Gly Lys Ile Trp Phe Pro Glu Lys Arg Pro Ile 1 5 10 Pro Lys His Phe Phe His Glu Lys His Cys Ile Leu Thr Tyr Val Asp . 20 . 25 30 Xaa Asn Asn Leu Ser Pro Lys Pro Cys His Asn Asn Ile Ser Ala Leu 35 40 45 Glu Ile Lys Ser Leu Cys Phe Leu Cys Ile Leu Leu Arg His Xaa Tyr 50 · 55 60 Ser Phe Asn Thr Tyr Leu Lys Asn Leu Leu Arg Arg Phe.Phe Ile Ile 70 75 80 65 Val Leu Gln Lys Thr Met Tyr Lys Leu 85 <210> 1481 <211> 370 <212> PRT <213> Homo sapiens <220>

<221> SITE <222> (216)

<223> Xaa equals any of the naturally occurring L-amino acids.

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<400> 1481 Met His Arg Leu Ile Phe Val Tyr Thr Leu Ile Cys Ala Asn Phe Cys · 15 Ser Cys Arg Asp Thr Ser Ala Thr Pro Gln Ser Ala Ser Ile Lys Ala 30 . Leu Arg Asn Ala Asn Leu Arg Arg Asp Glu Ser Asn His Leu Thr Asp . . 45 Leu Tyr Arg Arg Asp Glu Thr Ile Gln Val Lys Gly Asn Gly Tyr Val Gln Ser Pro Arg Phe Pro Asn Ser Tyr Pro Arg Asn Leu Leu Leu Thr Trp Arg Leu His Ser Gln Glu Asn Thr Arg Ile Gln Leu Val Phe Asp Asn Gln Phe Gly Leu Glu Glu Ala Glu Asn Asp Ile Cys Arg Tyr Asp . Phe Val Glu Val Glu Asp Ile Ser Glu Thr Ser Thr Ile Ile Arg Gly Arg Trp Cys Gly His Lys Glu Val Pro Pro Arg Ile Lys Ser Arg Thr . Asn Gln Ile Lys Ile Thr Phe Lys Ser Asp Asp Tyr Phe Val Ala Lys Pro Gly Phe Lys Ile Tyr Tyr Ser Leu Leu Glu Asp Phe Gln Pro Ala Ala Ala Ser Glu Thr Asn Trp Glu Ser Val Thr Ser Ser Ile Ser Gly Val Ser Tyr Asn Ser Pro Ser Val Thr Asp Pro Thr Leu Ile Ala Asp 195 , Ala Leu Asp Lys Lys Ile Ala Xaa Phe Asp Thr Val Glu Asp Leu Leu . Lys Tyr Phe Asn Pro Glu Ser Trp Gln Glu Asp Leu Glu Asn Met Tyr Leu Asp Thr Pro Arg Tyr Arg Gly Arg Ser Tyr His Asp Arg Lys Ser Lys Val Asp Leu Asp Arg Leu Asn Asp Asp Ala Lys Arg Tyr Ser Cys · 265 Thr Pro Arg Asn Tyr Ser Val Asn Ile Arg Glu Glu Leu Lys Leu Ala Asn Val Val Phe Phe Pro Arg Cys Leu Leu Val Gln Arg Cys Gly Gly Asn Cys Gly Cys Gly Thr Val Asn Trp Arg Ser Cys Thr Cys Asn Ser 310 . 315 

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Gly Lys Thr Val Lys Lys Tyr His Glu Val Leu Gln Phe Glu Pro Gly 330 325 His Ile Lys Arg Arg Gly Arg Ala Lys Thr Met Ala Leu Val Asp Ile 340 345 350 Gln Leu Asp His His Glu Arg Cys Asp Cys Ile Cys Ser Ser Arg Pro 355 360 . 365 Pro Arg . 370 <210> 1482 <211> 370 <212> PRT <213> Homo sapiens <400> .1482 Met His Arg Leu Ile Phe Val Tyr Thr Leu Ile Cys Ala Asn Phe Cys 1 5. 10 15 Ser Cys Arg Asp Thr Ser Ala Thr Pro Gln Ser Ala Ser Ile Lys Ala 20 25 30 Leu Arg Asn Ala Asn Leu Arg Arg Asp Glu Ser Asn His Leu Thr Asp 35 40 45 Leu Tyr Arg Arg Asp Glu Thr Ile Gln Val Lys Gly Asn Gly Tyr Val 50 55 60 Gln Ser Pro Arg Phe Pro Asn Ser Tyr Pro Arg Asn Leu Leu Leu Thr 65 70 75 80 Trp Arg Leu His Ser Gln Glu Asn Thr Arg Ile Gln Leu Val Phe Asp . 85 90 95 Asn Gln Phe Gly Leu Glu Glu Ala Glu Asn Asp Ile Cys Arg Tyr Asp 100 105 110 Phe Val Glu Val Glu Asp Ile Ser Glu Thr Ser Thr Ile Ile Arg Gly 115 120 125 ÷ Arg Trp Cys Gly His Lys Glu Val Pro Pro Arg Ile Lys Ser Arg Thr 130 135 · 140 Asn Gln Ile Lys Ile Thr Phe Lys Ser Asp Asp Tyr Phe Val Ala Lys 145 150 155 160 Pro Gly Phe Lys Ile Tyr Tyr Ser Leu Leu Glu Asp Phe Gln Pro Ala 165 170 175 Ala Ala Ser Glu Thr Asn Trp Glu Ser Val Thr Ser Ser Ile Ser Gly 180 185 190 . Val Ser Tyr Asn Ser Pro Ser Val Thr Asp Pro Thr Leu Ile Ala Asp 205 . 195 . 200 . .

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Ala Leu Asp Lys Lys Ile Ala Glu Phe Asp Thr Val Glu Asp Leu Leu 215 220 210 Lys Tyr Phe Asn Pro Glu Ser Trp Gln Glu Asp Leu Glu Asn Met Tyr 230 235 225 240 Leu Asp Thr Pro Arg Tyr Arg Gly Arg Ser Tyr His Asp Arg Lys Ser 245 250 255 Lys Val Asp Leu Asp Arg Leu Asn Asp Asp Ala Lys Arg Tyr Ser Cys 265 260 Thr Pro Arg Asn Tyr Ser Val Asn Ile Arg Glu Glu Leu Lys Leu Ala 280 285 275 Asn Val Val Phe Phe Pro Arg Cys Leu Leu Val Gln Arg Cys Gly Gly 290 295 300 Asn Cys Gly Cys Gly Thr Val Asn Trp Arg Ser Cys Thr Cys Asn Ser 305 310 315 320 Gly Lys Thr Val Lys Lys Tyr His Glu Val Leu Gln Phe Glu Pro Gly 325 330 335 His Ile Lys Arg Arg Gly Arg Ala Lys Thr Met Ala Leu Val Asp Ile 340 345 350 Gln Leu Asp His His Glu Arg Cys Asp Cys Ile Cys Ser Ser Arg Pro 355 360 365 Pro Arg . 370 . <210> 1483 <211> 229 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (206) <223> Xaa equals any of the naturally occurring L-amino acids . <400> 1483 Met Tyr Lys Leu Leu Phe Asp Leu Leu Thr Val Leu Ala Val Ala 1. 10 5 15 Leu Leu Ile Gln Phe Pro Arg Lys Leu Leu Cys Gly Leu Cys Pro Gly 20 25 30 Ala Leu Gly Arg Leu Ala Gly Thr Gln Glu Phe Gln Val Pro Asp Glu 35 40 45 Val Leu Gly Leu Ile Tyr Ala Gln Thr Val Val Trp Val Gly Ser Phe 50 55 60 Phe Cys Pro Leu Leu Pro Leu Leu Asn Thr Val Lys Phe Leu Leu Leu 70 65 · 75 80 901 ,

Phe Tyr Leu Lys Lys Leu Thr Leu Phe Ser Thr Cys Ser Pro Ala Ala 95 90 85 Arg Thr Phe Arg Ala Ser Ala Ala Asn Phe Phe Phe Pro Leu Val Leu 105 110 100 Leu Leu Gly Leu Ala Ile Ser Ser Val Pro Leu Leu Tyr Ser Ile Phe 125 120 115 Leu Ile Pro Pro Ser Lys Leu Cys Gly Pro Phe Arg Gly Gln Ser Ser 135 140 130 Ile Trp Ala Gln Ile Pro Glu Ser Ile Ser Ser Leu Pro Glu Thr Thr 160 155 150 145 Gln Asn Phe Leu Phe Phe Leu Gly Thr Gln Ala Phe Ala Val Pro Leu 170 175 165, Leu Leu Ile Ser Ser Ile Leu Met Ala Tyr Thr Val Ala Leu Ala Asn 190 185 180 Ser Tyr Gly Arg Leu Ile Ser Glu Leu Lys Arg Gln Arg Xaa Thr Glu 200 205 195 Ala Gln Asn Lys Val Phe Leu Ala Arg Arg Ala Val Ala Leu Thr Ser 220 210 215 متنا المستحي Thr Lys Pro Alá Leu. 225 <210> 1484 <211> 85 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (33) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (62) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1484 Phe Leu Gly Thr Gln Ala Phe Ala Val Pro Leu Leu Leu Ile Ser Arg 15 10 -5 1 Ser Gln Thr Phe Gly Tyr Asn Gly Arg Ala Cys Gln Glu Trp Leu Pro 30 25 20 Xaa Leu Ile Ser Ser Ile Leu Met Ala Tyr Thr Val Ala Leu Ala Asn 40 . 45 35 Ser Tyr Gly Arg Leu Ile Ser Glu Leu Lys Arg Gln Arg Xaa Thr Glu 60 -55 50

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Ala Gln Asn Lys Val Phe Leu Ala Arg Arg Ala Val Ala Leu Thr Ser 70 65 Thr Lys Pro Ala Leu 85 <210> 1485 <211> 229 <212> PRT <213> Homo sapiens đ <220> <221> SITE <223> Xaa equals any of the naturally occurring L-amino acids Met Tyr Lys Leu Leu Leu Phe Asp Leu Leu Thr Val Leu Ala Val Ala 5 · Leu Leu Ile Gln Phe Pro Arg Lys Leu Leu Cys Gly Leu Cys Pro Gly 20 Ala Leu Gly Arg Leu Ala Gly Thr Gln Glu Phe Gln Val Pro Asp Glu 35 Val Leu Gly Leu Ile Tyr Ala Gln Thr Val Val Trp Val Gly Ser Phe . 55 50 Phe Cys Pro Leu Leu Pro Leu Leu Asn Thr Val Lys Phe Leu Leu 70 Phe Tyr Leu Lys Lys Leu Thr Leu Phe Ser Thr Cys Ser Pro Ala Ala 85 Arg Thr Phe Arg Ala Ser Ala Ala Asn Phe Phe Phe Pro Leu Val Leu 100 Leu Leu Gly Leu Ala Ile Ser Ser Val Pro Leu Leu Tyr Ser Ile Phe Leu Ile Pro Pro Ser Lys Leu Cys Gly Pro Phe Arg Gly Gln Ser Ser 115 Ile Trp Ala Gln Ile Pro Glu Ser Ile Ser Ser Leu Pro Glu Thr Thr 130 150 145 Gln Asn Phe Leu Phe Phe Leu Gly Thr Gln Ala Phe Ala Val Pro Leu 165 Leu Leu Ile Ser Ser Ile Leu Met Ala Tyr Thr Val Ala Leu Ala Asn 180 Ser Tyr Gly Arg Leu Ile Ser Glu Leu Lys Arg Gln Arg Xaa Thr Glu 200 195 Ala Gln Asn Lys Val Phe Leu Ala Arg Arg Ala Val Ala Leu Thr Ser 903

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Thr Lys Pro Ala Leu 225 215

<210> 1486 <211> 93 <212> PRT <213> Homo sapiens Met Ala Thr Phe Ser Leu Cys Tyr Leu Met Ala Phe Pro Leu Cys Ala 5 Gly Ile Ala Gly Ile Ser Val Cys Val Lys Ile Ser Cys Phe Tyr Lys Asp Ile Ser Gin Thr Gly Leu Arg Pro Thr Leu Lys Ala Tyr Leu Asn . 20 Phe Asn Leu Leu Phe Ser Gly Pro Ile Ser Lys Tyr Ser Leu Ile Leu Arg Tyr Trp Tyr Leu Gly Leu Gln His Thr Asn Phe Gly Val Asp Thr 65 Ile Gln Pro Ile Thr Asn Cys Ala His Glu Met Ile Tyr 85 <210> 1487 <211> 124 <212> PRT <213> Homo sapiens <220> <223> Xaa equals any of the naturally occurring L-amino acids <221> SITE . . <220> <223> Xaa equals any of the naturally occurring L-amino acids <221> SITE . <220> <223> Xaa equals any of the naturally occurring L-amino acids <221> SITE <222> (28) . *r* <220> <223> Xaa equals any of the naturally occurring L-amino acids <221> SITE <220> <221> SITE 904

<223> Xaa equals any of the naturally occurring L-amino acids <222> (70) Ala Leu Pro Phe Thr Leu Asn Lys Thr Ser Asn Tyr Pro Gln Asp Leu 5 1 Val Leu Xaa Ser Leu Leu Cly Xaa Asn Tyr Xaa Gln Leu Gln Ile 20 Leu Leu Glu Cys Ile Phe Pro Val Pro His Ser Leu Leu Tyr Val Val 40 45 35 Leu Pro Asn Ser Ile Asp Leu Xaa Gln Lys Leu Pro Arg Asp Leu Pro 55 50 His Leu Pro Cys Pro Xaa Phe Leu Trp Pro Arg Pro Gly Ser Pro Pro . 70 65 Lys Cys Phe Leu Ser Leu Ser Leu Thr Ala Leu Pro Leu Ser Ser Cys 85 90 Arg Tyr Thr Leu Pro Pro Ser Pro His Pro Leu Met Pro Ser Pro Leu 105 100 Leu Pro Ser Trp Val Gln Pro Ser Cys Tyr Leu Ala 120 115 . . . <210> 1488 <211> 59 <212> PRT <213> Homo sapiens Met Ala Thr Phe Ser Leu Cys Tyr Leu Met Ala Phe Pro Leu Cys Ala 5 1 Gly Ile Ala Gly Ile Ser Val Cys Val Lys Ile Ser Cys Phe Tyr Lys 20 Asp Ile Ser Gln Thr Gly Leu Arg Pro Thr Leu Lys Ala Tyr Leu Asn 35 Phe Asn Leu Leu Phe Ser Gly Pro Ile Gln Ile 55 50 <210> 1489 <211> 314 <212> PRT <213> Homo sapiens Gly Ser Gly Arg Gln Ala Gly Trp Pro Arg Gly Leu Leu Ser Gly Pro 10 5 . 1 Ala Pro Ser Glu Arg Ser Ala Val Ala Arg Leu Ala Pro Thr Glu Ser

30 25 20 Leu Ala Arg Met Glu Ala Val Val Asn Leu Tyr Gln Glu Val Met Lys 40 35 His Ala Asp Pro Arg Ile Gln Gly Tyr Pro Leu Met Gly Ser Pro Leu 60 55 50 Leu Met Thr Ser Ile Leu Leu Thr Tyr Val Tyr Phe Val Leu Ser Leu 75 70 65 Gly Pro Arg Ile Met Ala Asn Arg Lys Pro Phe Gln Leu Arg Gly Phe 90 85 Met Ile Val Tyr Asn Phe Ser Leu Val Ala Leu Ser Leu Tyr Ile Val 105 100 Tyr Glu Phe Leu Met Ser Gly Trp Leu Ser Thr Tyr Thr Trp Arg Cys 125 . 115 . 120 Asp Pro Val Asp Tyr Ser Asn Ser Pro Glu Ala Leu Arg Met Val Arg . 140 135 130 , Val Ala Trp Leu Phe Leu Phe Ser Lys Phe Ile Glu Leu Met Asp Thr . 160 155 150 145 Val Ile Phe Ile Leu Arg Lys Lys Asp Gly Gln Val Thr Phe Leu His 170 165 . Val Phe His His Ser Val Leu Pro Trp Ser Trp Trp Trp Gly Val Lys 185 180 . Ile Ala Pro Gly Gly Met Gly Ser Phe His Ala Met Ile Asn Ser Ser 205 200 195 Val His Val Ile Met Tyr Leu Tyr Tyr Gly Leu Ser Ala Phe Gly Pro 220 215 210 . Val Ala Gln Pro Tyr Leu Trp Trp Lys Lys His Met Thr Ala Ile Gln 235 230 225 Leu Ile Gln Phe Val Leu Val Ser Leu His Ile Ser Gln Tyr Tyr Phe 250 245 Met Ser Ser Cys Asn Tyr Gln Tyr Pro Val Ile Ile His Leu Ile Trp 265 260 Met Tyr Gly Thr Ile Phe Phe Met Leu Phe Ser Asn Phe Trp Tyr His 285 280 275 Ser Tyr Thr Lys Gly Lys Arg Leu Pro Arg Ala Leu Gln Gln Asn Gly 300 -295 290 Ala Pro Gly Ile Ala Lys Val Lys Ala Asn 310 305

<210> 1490 <211> 258

906<sup>.</sup>

<212> PRT <213> Homo sapiens <400> 1490 Met Lys His Ala Asp Pro Arg Ile Gln Gly Tyr Pro Leu Met Gly Ser Pro Leu Leu Met Thr Ser Ile Leu Leu Thr Tyr Val Tyr Phe Val Leu Ser Leu Gly Pro Arg Ile Met Ala Asn Arg Lys Pro Phe Gln Leu Arg Gly Phe Met Ile Val Tyr Asn Phe Ser Leu Val Ala Leu Ser Leu Tyr Ile Val Tyr Glu Phe Leu Met Ser Gly Trp Leu Ser Thr Tyr Thr Trp Arg Cys Asp Pro Gln Asp Cys Thr Leu Gly Gln Cys Pro Ser Val Pro Ser Pro Pro Thr Pro Val Thr Lys Ala Tyr Val Val Arg Thr Glu Gln Gly Thr Gly Pro Pro Leu Pro Thr Ala Ala Leu Gln Gly Pro Arg Leu Trp Phe Leu Thr His Phe Pro Arg Ala Ala Pro Gly Met Trp Pro His Cys Cys Leu Pro Leu Gln Ser Trp Gly Leu Lys Gly Leu Tyr Ser Tyr Phe Pro Leu Pro Ala Leu Lys Leu Gly Arg Gly Ala Leu Arg Ala Gly Pro Thr Lys Gly Leu Val Ala Phe Phe Leu Thr Gln Lys Arg Ser Ala Ile Met Ser Leu Trp Thr Gln Ser His Ser Ser Thr Pro His Thr Glu Ala Val Ala Ser Gly Pro Lys Val Arg Val Gly Gly Leu Gly Ile Gln Pro Val Glu Ala Ala Tyr Ser Thr Cys Val Leu Ile Lys Ser Asp Arg Gly Asn Gln Lys Lys Lys Lys Lys Lys Lys Leu Glu Asn Tyr Phe 

Leu Lys

<210> 1491 <211> 222 <212> PRT .

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<213> Homo sapiens <400> 1491 Met Lys His Ala Asp Pro Arg Ile Gln Gly Tyr Pro Leu Met Gly Ser 10 15 5 1 Pro Leu Leu Met Thr Ser Ile Leu Leu Thr Tyr Val Tyr Phe Val Leu 25 30 20 Ser Leu Gly Pro Arg Ile Met Ala Asn Arg Lys Pro Phe Gln Leu Arg 40 45 35 Gly Phe Met Ile Val Tyr Asn Phe Ser Leu Val Ala Leu Ser Leu Tyr 55 60 50 Ile Val Tyr Glu Val Ile Phe Ile Leu Arg Lys Lys Asp Gly Gln Val 70 75 65 Thr Phe Leu His Val Phe His His Ser Val Leu Pro Trp Ser Trp Trp 95 . 90 85 Trp Gly Val Lys Ile Ala Pro Gly Gly Met Gly Ser Phe His Ala Met 105 110 100 · . Ile Asn Ser Ser Val His Val Ile Met Tyr Leu Tyr Tyr Gly Leu Ser 125 115 . 120 Ala Phe Gly Pro Val Ala Gln Pro Tyr Leu Trp Trp Lys Lys His Met 140 130 . 135 Thr Ala Ile Gln Leu Ile Gln Phe Val Leu Val Ser Leu His Ile Ser 160 145 150 155 Gln Tyr Tyr Phe Met Ser Ser Cys Asn Tyr Gln Tyr Pro Val Ile Ile 175 170 165 His Leu Ile Trp Met Tyr Gly Thr Ile Phe Phe Met Leu Phe Ser Asn 185 190. 180 Phe Trp Tyr His Ser Tyr Thr Lys Gly Lys Arg Leu Pro Arg Ala Leu 205 . 195 · 200 . Gln Gln Asn Gly Ala Pro Gly Ile Ala Lys Val Lys Ala Asn 220 215 210

<210> 1492
<211> 93
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Met Tyr Gly Leu Ser Ile Cys Tyr Leu Lys Cys Leu Gly Pro Glu Val
1 5 10 10 15
Phe Trp Thr Phe Phe Leu Phe Trp Asn Thr Ser Ile Cys Ile Leu Pro
20 25 30
Val Glu His Pro Lys Ser Glu Ile Ser Lys Ile Gln Asn Val Pro Val

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45 40 35 Ser Leu Asn Ser Ser Val Asp Gly His Leu Ser Tyr Phe Arg Phe Glu 55 . 60 50 Ala Ile Met Arg Glu Ala Ala Val His Val Phe Val Tyr Val Lys Cys 70 75 80 65 . Val Phe Thr Cys Gln Ile Leu Lys Asp Leu Thr Asp Phe 85 90 . • <210> 1493 <211> 65 <212> PRT <213> Homo sapiens <400> 1493 Lys Leu Ser Asn Cys Asn Cys Phe Gln Leu Leu Ser Glu Val Gly Ile 15 5 10 1 . Met Val Asp Leu Ile Ser Ser Val Leu Phe Leu Gln Leu Tyr Tyr Gln 25 30 20 Val Leu Asn Phe Gly Met Ile Val Ser Ser Ala Leu Met Ile Trp Lys 45 35 40 Gly Leu Met Val Ile Thr Gly Ser Glu Ser Pro Ile Val Val Leu 55 60 50 Arg 65 <210> 1494 <211> 93 <212> PRT <213> Homo sapiens <400> 1494 Met Tyr Gly Leu Ser Ile Cys Tyr Leu Lys Cys Leu Gly Pro Glu Val 15 . 5 10 1 Phe Trp Thr Phe Phe Leu Phe Trp Asn Thr Ser Ile Cys Ile Leu Pro 25 30 20 • Val Glu His Pro Lys Ser Glu Ile Ser Lys Ile Gln Asn Val Pro Val 40 45 35 . Ser Leu Asn Ser Ser Val Asp Gly His Leu Ser Tyr Phe Arg Phe Glu 55 60 50 Ala Ile Met Arg Glu Ala Ala Val His Val Phe Val Tyr Val Lys Cys 80 65 70 75 . Val Phe Thr Cys Gln Ile Leu Lys Asp Leu Thr Asp Phe ۰. . 85 90

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. <210> 1495 <211> 81 <212> PRT <213> Homo sapiens <400> 1495 Met Gly Lys Pro Ser Leu Leu Phe Phe Gly Leu Met Ala Ser Trp Arg 5 10 15 1 Thr Arg Ser Gln Ala Arg Arg Thr Trp Ser Thr Ser Ser Arg Met Pro 25 20 30 Gly Arg Asn Val Leu Leu Arg Ser Arg Lys Arg Arg Ser Gln Ile Ser 3.5 . 40 · 45 Ser Ser Ile Ser Trp Ser Ile Ala Leu Gly Pro Val Met Pro Trp Pro 50 55 60 . Gly Leu Ile Leu Phe Leu Lys Ile Ser Arg Ser Ser Thr Pro Thr Arg 65 70 75 80 Leu <210> 1496 <211> 81 <212> PRT <213> Homo sapiens <400> 1496 Met Gly Lys Pro Ser Leu Leu Phe Phe Gly Leu Met Ala Ser Trp Arg 1 5 10 15 Thr Arg Ser Gln Ala Arg Arg Thr Trp Ser Thr Ser Ser Arg Met Pro 20 . 25 30 Gly Arg Asn Val Leu Leu Arg Ser Arg Lys Arg Arg Ser Gln Ile Ser 45 40 35 Ser Ser Ile Ser Trp Ser Ile Ala Leu Gly Pro Val Met Pro Trp Pro 50 55 60 Gly Leu Ile Leu Phe Leu Lys Ile Ser Arg Ser Ser Thr Pro Thr Arg .70 75 , 80 65 Leu . <210> 1497 <211> 47 <212> PRT 1 <213> Homo sapiens

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Gly.	Gly	Ser	Pro 20	Trp	Leu	Leu	Ile	Ile 25	Thr	Val	Phe	Leu	Arg 30	Ser	Tyr
Lys	Phe	Ala 35	Ile	Ser	Leu	Cys	Thr 40	Ser	Tyr	Leu	Cys	Val 45	Ser	Phe	Leu
Lys	Thr 50	Ile	Phe	Pro	Ser	Gln 55	Asn	Gly	His	Asp	Gly 60	Ser	Thr	Asp	Val
Gln 65	Gln	Arg	Ala	Arg	Arg 70	Ser	Asn	Xaa	Arg	Arg 75	Gln	Glu	Gly	Ile	Lys 80
Ile	Val	Leu	Glu	Asp 85	Ile	Phe	Thr	Leu	Trp 90	Arġ	Gln	Val	Glu	Thr 95	Lys
Val.	Arg	Ala	Lys 100	Ile	Arg	Lys	Met	Lys 105	Val	Thr	Thr	Lys	Val 110	Asn	Arg
His	Asp	Lys 115	Ile	Asn	Gly	Lys	Arg 120	ГÀŻ	Thr	Ala	Lys	Glu 125	His	Leu	Arg
Lys	Leu 130	Ser	Met	Lys	Glu	Arg 135	Glu	His	Gly	Glu	Lys 140	Glu	Arg	Gln	Val
Ser 145	Glu	Ala	Glu	Glu	Asn 150	Gly	Lys	Leu	Asp	Met 155	Lys	Glu	Ile	His	Thr 160
Tyr	Met	Glu	Met	Phe 165	Gln	Arg	Ala	Gln	Ala 170	Leu	Arg	Arg	Arg	Ala 175	Glu
Asp	Tyr	Tyr	Arg 180	Cys	Lys	Ile	Thr	Pro 185	Ser	Ala	Arg	Lys	Pro 190	Leu	Cys
Asn	Xaa	Val 195	Arg	Met	Ala	Ala	Xaa 200	Glu	His	Arg	His	Ser 205	Ser	Gly	Leu
Pro	Xaa 210	Trp	Pro	Tyr	Leu	Thr 215	Ala	Glu	Thr	Leu	Lys 220	Asn	Arg	Met	Gly
225					Pro 230					235			-		240
Leu	Ser	Leu	Lys	Thr 245	Pro	Pro	Glu	Cys	Leu 250	Leu	His	Pro	Leu	Pro 255	Pro
Ser	Val	Asp	Asp 260	Asn	Ile	Lys	Glu	Cys 265	Pro	Leu	Ala	Prọ	Leu 270	Pro	Pro
Ser	Val	Asp 275	Asp	Asn	Leu	Lys	Glu 280	Суз	Leu	Leu	Val	Pro 285	Leu	Pro	Pro
Ser	Pro 290	Leu	Pro	Pro	Ser	Val 295	Asp	Asp	Asn	Leu	Lys 300	Asp	Cys	Leu	Phe
Val 305	Pro	Leu	Pro	Pro	Ser 310	Pro	Leu	Pro	Pro	Ser 315		Asp	Asp	Asn	Leu 320
Lys	Thr	Pro	Pro	Leu 32 <u>5</u>	Ala	Thr	Gİn	Glu	Ala 330	Glu	Ala	Glu	Lys	Pro 335,	

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Lys Pro Lys Arg Trp Arg Val Asp Glu Val Glu Gln Ser Pro Lys Pro 340 345 350 Lys Arg Arg Arg Ala Asp Glu Val Glu Gln Ser Pro Lys Pro Lys Arg 360 365 355 Gln Arg Glu Ala Glu Ala Gln Gln Leu Pro Lys Pro Lys Arg Arg Arg 370 375 380 Leu Ser Lys Leu Xaa Thr Arg His Cys Thr 390 385 <210> 1499 <211> 212 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (54) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (74) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (81) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (101) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE · <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1499 Met Arg Leu Arg Phe Trp Leu Leu Ile Trp Leu Leu Cly Phe Ile 1 . 10 5 15 Ser His Gln Pro Thr Pro Val Ile Asn Ser Leu Ala Val Tyr Arg His 20 25 30 . Arg Glu Thr Asp Phe Gly Val Gly Val Arg Asp His Pro Gly Gln His 35 40 45 Gly Lys Thr Pro Ser Xaa Gln Lys Leu Asp Asn Leu Ile Ile Ile Ile 60 50 55 Ile Gly Phe Leu Arg Arg Tyr Thr Phe Xaa Ile Leu Phe Cys Thr Ser 70 75 80

Xaa Leu Cys Val Ser Phe Leu Lys Thr Ile Phe Trp Ser Arg Asn Gly 90 95 85 His Asp Gly Ser Xaa Asp Val Gln Gln Arg Ala Trp Arg Ser Asn Arg 100 · 105 110 Ser Arg Gln Lys Gly Leu Arg Ser Ile Xaa Met His Thr Lys Lys Arg 115 120 125 Val Ser Ser Phe Arg Gly Asn Lys Ile Gly Leu Lys Asp Val Ile Thr 130 135 140 Leu Arg Arg His Val Glu Thr Lys Val Arg Ala Lys Ile Arg Lys Arg - 150 155 145 160 Lys Val Thr Thr Lys Ile Asn Arg His Asn Lys Ile Asn Gly Lys Arg 165 170 . 175 Lys Thr Ala Arg Lys Gln Lys Met Phe Gln Arg Ala Gln Glu Leu Arg 180. 185 190 . Arg Arg Ala Glu Asp Tyr His Lys Cys Lys Val Arg Ser Phe Leu Pro 195 200 205 Ala Val Ala Gly 210 <210> 1500 <211> 121 <212> 'PRT <213> Homo sapiens <220> <221> SITE <222> (110) <223> Xaa equals any of the naturally occurring L-amino acids · · . <220> <221> SITE <222> (112) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (114) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1500 Met Ala Thr Leu Val Trp Arg Leu Tyr Leu Leu Gln Pro Glu Leu Val 10 15 1 5 Leu Pro Ser Pro Pro Pro Pro Pro Arg Phe Pro Gly Pro Val Gln Thr 20 2.5 30

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Pro Lys Ile Pro Gly Pro Ala Arg Gly Pro Arg Thr Gly Phe Gln Pro 35 40 45 Pro Ala Phe Ser Phe Pro Ser Pro Thr Pro Phe Phe Ser Ala Gly Thr 55 60 50 Pro Val Leu Ser Trp Lys Phe Ala Val Leu Cys Pro Ile Ala Gln Glu 70 75 65 80 Leu Leu Pro Ala Glu Lys Gly Ala Arg Asn Lys Cys Ser Gly Leu Ser 90 95 85 Arg Ser Tyr Ile Phe Ala Met Leu Pro Glu Met Gly Gly Xaa Asn Xaa • 100 105 110 Leu Xaa Gln Xaa Asn Glu Trp His Gly . 120 <210> 1501 <211> 128 <212> PRT <213> Homo sapiens <400> 1501 Met Asp Arg Leu Lys Ser His Leu Thr Val Cys Phe Leu Pro Ser Val 15 1 5 10 Pro Phe Leu Ile Leu Val Ser Thr Leu Ala Thr Ala Lys Ser Val Thr 20 . 25 30 Asn Ser Thr Leu Asn Gly Thr Asn Val Val Leu Gly Ser Val Pro Val 40 35 45 Ile Ile Ala Arg Thr Asp His Ile Ile Val Lys Glu Gly Asn Ser Ala 50 55 60 Leu Ile Asn Cys Ser Val Tyr Gly Ile Pro Asp Pro Gln Phe Lys Trp 75 70 80 65 Tyr Asn Ser Ile Gly Lys Leu Leu Lys Glu Glu Glu Asp Glu Lys Glu - 95 85 90 Arg Gly Gly Gly Lys Trp Gln Met His Asp Ser Gly Leu Leu Asn Ile 105 100 110 • Thr Lys Val Ser Phe Ser Asp Arg Gly Lys Tyr Thr Val Cys Gly Phe 120 125 115

<210> 1502 <211> 120 <212> PRT <213> Homo sapiens

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1				5					10					15				
Pro	Phe	Leu	Ile 20	Leu	Val	Ser	Thr	Leu 25	Ala	Thr'	Ala	Lys	Ser 30	Val	Thr			
Asn	Ser	Thr 35	Leu	Asn	Gly	Thr	Asn 40	Val	Val	Leu	Gly	Ser 45	Val	Pro	Val			
Ile	Ile 50	Ala	Ąrg	Thr	Asp	His 55	Ile	Ile	Val	Lys	Glu 60	Gly	Asn	Ser	Ala			
Leu 65	Ile	Asn	Cys	Ser	Val 70	Tyr	Gly	Iļe	Pro	Asp 75	Pro	Gln	Phe	Lys	Trp 80			
Tyr	Asn	Ser	Ile	Gly 85	Lys	Leu	Leu	Lys	Glu 90	Ġlu	Glu	Asp	Glu	Lys 95	Glụ			
Arg	Gly	Gly	Gly 100	Lys	Trp	Gln	Met	His 105	Asp	Ser	Gly	Leu	Leu 110	Asn	Ile			
Thr	Lys	Val 115	Ser	Phe	Ser	Asp	Arg 120	Gly	Lys	Tyr	Thr	Cys 125	Val	Ala	Ser			
Asn	Ile 130	Tyr	Gly	Thr	Val	Asn 135	Asn	Thr	Val	Thr	Leu 140	Arg	Val	Ile	Phe			
Thr 145	Ser	Gly	Asp	Met	Gly 150	Val	Tyr	Tyr	Met	Уа1 155	Val	Cys	Leu	Val	Ala 160			
Phe	Thr	Ile	Val	Met 165	Val	Leu	Asn	Ile	Thr 170	Arg	Leu	Cys	Met	Met 175	Ser	·		
Ser	His	Leu	Lys 180	Lys	Thr	Glu	Lys	Ala 185	Ile	Asn	Glu	Phe	Phe 190	Arg	Tḥr			
Glu	Gly	Ala 195	Glu	Lys	Leu	Gln	Lys 200	Ala	Phe	Glu	Ile	Ala 205	Lys	Arg	Ile	٠		
Pro	Ile 210	Ile	Thr	Ser	_Ala	Lys 215	Thr	Leu	Glu	Leu	Ala 220	Lys	Val	Thr	Gln			
225	-				230			_	Ile	235					240			
			-	245					Cys 250					255				
			260					265				•	270		Arg			
		275		-			280		-	-		285			Thr			
	290				•	295					300				Asp			
305					310					315			•		Ser 320			
Val	Hiș	Pro	Gln	Ser	Lys	Lys	Glu		Ala 917	Asp	Asp	Gln	Glu	. Gly	Gly		·	

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330 325 335 Gln Phe Glu Val Lys Asp Val Glu Glu Thr Glu Leu Ser Ala Glu His • 345 340 350 Ser Pro Glu Thr Ala Glu Pro Ser Thr Asp Val Thr Ser Thr Glu Leu 355 360 365 Thr Ser Glu Glu Pro Thr Pro Val Glu Val Pro Asp Lys Val Leu Pro 375 370 380 Pro Ala Tyr Leu Glu Ala Thr Glu Pro Ala Val Thr His Asp Lys Asn 390 385 395 400 Thr Cys Ile Ile Tyr Glu Ser His Val 405 <210> 1504 <211> 107. <212> PRT <213> Homo sapiens <220> <221> SITE <222> (63) <223> Xaa equals any of the naturally occurring L-amino acids . <220> <221> SITE <222> (64) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (82) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1504 Ser Met Lys Ala Lys Arg Asn Lys Gly Arg Trp Val Ala Ala Gly Pro 1 5 15 10 Thr Ala Ala Thr Ala Trp Ile Val Leu Thr Val Gln Ala Ala Cys Pro 25 20 30 Glu Gly Lys Cys Pro Leu Pro Gly Val Cys Ala Pro Ile Thr Trp Ala 35 40 45 Pro Ser Tyr Leu Thr Ala Gly Lys Ala Lys Leu Ala Gly Pro Xaa Xaa 50 55 . 60 Tyr Lys Pro Gly Pro Val Leu Lys Ala Ala His Leu Pro Met Gly Gln . 80 65 70 75 His Xaa His Thr Thr Pro Trp Trp Gln Pro Leu Phe Ile Ile Ser Val 85 90 95 Ser Arg Tyr Pro Pro Arg Thr Pro Lys Gln His 100 105

<210> 1505 <211> 106 <212> PRT <213> Homo sapiens <400> 1505 Met Lys Ala Lys Arg Asn Lys Gly Arg Trp Val Ala Ala Gly Pro Thr 10 - 5 15 1 Ala Ala Thr Ala Trp Ile Val Leu Thr Val Gln Ala Ala Cys Pro Glu 20 25 30 Gly Lys Cys Pro Leu Pro Gly Val Cys Ala Pro Ile Thr Trp Ala Pro 35 40 45 Ser Tyr Leu Thr Ala Gly Lys Ala Lys Leu Ala Gly Pro Arg Thr Tyr 50 55 60 Lys Pro Gly Pro Val Leu Lys Ala Ala His Leu Pro Met Gly Gln His 65 70 75 . 80 Pro His Thr Thr Pro Trp Trp Gln Pro Leu Phe Ile Ile Ser Val Ser 90 85 95 Arg Tyr Pro Pro Arg Thr Pro Lys Gln His 100 105 <210> 1506 <211> 106 <212> PRT <213> Homo sapiens <400> 1506 . Met Lys Ala Lys Arg Asn Lys Gly Arg Trp Val Ala Ala Gly Pro Thr 5 1 10 15 Ala Ala Thr Ala Trp Ile Val Leu Thr Val Gln Ala Ala Cys Pro Glu 25 20 30 Gly Lys Cys Pro Leu Pro Gly Val Cys Ala Pro Ile Thr Trp Ala Pro 35 40 45 Ser Tyr Leu Thr Ala Gly Lys Ala Lys Leu Ala Gly Pro Arg Thr Tyr 55 50 60 . Lys Pro Gly Pro Val Leu Lys Ala Ala His Leu Pro Met Gly Gln His 75 65 70 80 Pro His Thr Thr Pro Trp Trp Gln Pro Leu Phe Ile Ile.Ser Val Ser 90 85 95 Arg Tyr Pro Pro Arg Thr Pro Lys Gln His . -100 105 ,

919 ·

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<400> 1513 Met Lys Arg Gln Arg Leu Pro Leu Ala Leu Gln Asn Leu Phe Leu Tyr 1 5 10 15

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· 70 75 65 80 Gly Ile Ala Ile Tyr Thr Ser Met Met Thr Ser Asp Asn Tyr Tyr Tyr 95 85 . 90 Thr His Ser Ile Trp His Ile Leu Leu Ala Gly Ser Ala Ala Leu Leu 100 105 110 Leu Pro Pro Pro Asp Gln Pro Ala Glu Pro Trp Ala Cys Ser Gln Lys 115 120 . 125 . Phe Pro Cys His Tyr Gln Ile Cys Lys Asn Asp Arg Glu Glu Leu Tyr 135 140 130 Ala Val Thr 145 . <210> 1518 <211> 92 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (70) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1518 · Met Trp Gln Tyr His Arg Leu Ser Cys Thr Ala Trp Gln Pro Val Ile 5 10 1 15 Leu Ser Phe Ser Leu Ser Val Gly His Arg Ile Leu Leu Ala Leu Phe 25 30 20 Phe Phe Ile Leu His Leu Ser Ile Leu Ile Ala Thr Glu Cys Arg Pro 35 40 45 Trp Tyr Ser Phe His Leu Val Ser Leu Pro Ser Phe Leu Pro Gln Phe 50 55 . 60 Leu Leu Cys Leu Ala Xaa Ile Cys Leu Phe Gly Phe Thr Thr Leu Leu 70 75 65 . . 80 Phe Ser Phe Cys Cys Gln Val His Val Leu Gly His 85 ' · 90 <210> 1519 <211> 58 <212> PRT

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Ile Ser Trp Asp Arg Asn Arg Asn Gly Ile Gly Ile Ser Lys Ser657075

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Met Pro Leu Phe Phe Thr Arg Phe His Pro Ala Leu Gly Pro Leu Ala 1 .5 10 15 Leu Ser Leu Leu Ala Gly Phe Ala Ala Gly Ser Leu Gln Ala Ile Gly 20 25 30 Arg Thr Glu Glu Lys Gly Val Arg Val Leu Thr Ser Gln Ala Pro Pro 35 40 45 Tyr Arg Val Met Gly Gln Leu His Ser Ser Thr Lys Gly Phe Ser Phe 50 55 60 Cys Gln Gly Val Cys Pro Arg Ala Leu Ser Leu Trp Val Thr Thr Pro 65 , 80 70 75 Leu Phe Leu Pro Pro Ser Pro Arg Leu Ala Met Val Pro Thr Val Ser . 85 · 95 90 Cys Pro Gly Tyr Cys Pro Ser Cys Phe Ser Val Ser Cys Leu Cys Phe . 100 105 110 Thr Thr Gly Pro Ser Ser Asn Ser Ala 115 120

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (19) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1525 Met Gly Pro Val Ser Glu Leu Ser Ile Phe Ile Leu Leu Phe Val Phe 1 5 . 15 10 Cys Phe Xaa Phe Ser Leu Met Pro Asp Ile Arg Arg Thr Leu His Phe 20 25 30 Trp Leu His Ser Leu Leu Tyr Pro His Glu Thr Asp Gln Cys Leu Gln 35 40 45 Ser Ser Ala Ile Pro Phe Gln Val Phe Tyr Val Gln Gln Lys Lys Arg

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55 50 60 Ala Ser Leu Ser Ser Ser Ser His Ile Ile Lys Gly Ile Ala Pro Leu 65 70 75 80 Leu Asn Gln Ser Val Asn His Ser Gly Pro Ile . 85 90 <210> 1526 <211> 66 <212> PRT <213>. Homo sapiens <220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (13) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1526 Ser Thr Leu Xaa Val Thr Phe Ile Cys Ser Ser Arg Xaa Leu Leu Arg • 1 5 10 15 Glu Arg Gly Ala Val Leu Lys Thr Asn Pro Ile Pro Ile Leu Leu Lys 20 25 30 Lys Pro Leu Leu Cys Pro Ser Phe Ile His Asn Leu Val Pro His Pro .35 40 45 His Leu Pro Gln Leu Leu Leu Phe Ser Asn Phe Leu Cys Arg Cys Pro , 50 · . . <del>.</del> 55 60 Tyr His 65 <210> 1527 <211> 91 <212> PRT <213> Homo sapiens <400> 1527 Met Gly Pro Val Ser Glu Leu Ser Ile Phe Ile Leu Leu Phe Val Phe 5 1 10 15 . Cys Phe Val Phe Ser Leu Met Pro Asp Ile Arg Arg Thr Leu His Phe 20 25 30 Trp Leu His Ser Leu Leu Tyr Pro His Glu Thr Asp Gln Cys Leu Gln . 35 40 45 • Ser Ser Ala Ile Pro Phe Gln Val Phe Tyr Val Gln Gln Lys Lys Arg 50 • • 55 60

Ala Ser Leu Ser Ser Ser His Ile Ile Lys Gly Ile Ala Pro Leu . 75 Leu Asn Gln Ser Val Asn His Ser Gly Pro Ile '9 N <210> 1528 <211> 336 <212> PRT <213> Homo sapiens <400> 1528 Met Ala Leu Ala Arg Pro Val Arg Leu Phe Ser Leu Val Thr Arg Leu 1.5 Leu Leu Ala Pro Arg Arg Gly Leu Thr Val Arg Ser Pro Asp Glu Pro Leu Pro Val Val Arg Ile Pro Val Ala Leu Gln Arg Gln Leu Glu Gln Arg Gln Ser Arg Arg Arg Asn Leu Pro Arg Pro Val Leu Val Arg Pro Gly Pro Leu Leu Val Ser Ala Arg Arg Pro Glu Leu Asn Gln Pro Ala Arg Leu Thr Leu Gly Arg Trp Glu Arg Ala Pro Leu Ala Ser Gln Gly Trp Lys Ser Arg Arg Ala Arg Arg Asp His Phe Ser Ile Glu Arg Ala Gln Gln Glu Ala Pro Ala Val Arg Lys Leu Ser Ser Lys Gly Ser Phe Ala Asp Leu Gly Leu Glu Pro Arg Val Leu His Ala Leu Gln Glu Ala Ala Pro Glu Val Val Gln Pro Thr Thr Val Gln Ser Ser Thr Ile Pro Ser Leu Leu Arg Gly Arg His Val Val Cys Ala Ala Glu Thr Gly Ser 170 -. . Gly Lys Thr Leu Ser Tyr Leu Leu Pro Leu Leu Gln Arg Leu Leu Gly . Gln Pro Ser Leu Asp Ser Leu Pro Ile Pro Ala Pro Arg Gly Leu Val Leu Val Pro Ser Arg Glu Leu Ala Gln Gln Val Arg Ala Val Ala Gln Pro Leu Gly Arg Ser Leu Gly Leu Leu Val Arg Asp Leu Glu Gly Gly 

His Gly Met Arg Arg Ile Arg Leu Gln Leu Ser Arg Gln Pro Ser Ala 245 250 255 Asp Val Leu Val Ala Thr Pro Gly Ala Leu Trp Lys Ala Leu Lys Ser 260 265 270 Arg Leu Ile Ser Leu Glu Gln Leu Ser Phe Leu Val Leu Asp Glu Ala 280 285 275 Asp Thr Leu Leu Asp Glu Ser Phe Leu Glu Leu Val Asp Tyr Ile Leu · 290 295 300 Glu Lys Ser His Ile Ala Glu Gly Pro Ala Asp Leu Glu Asp Pro Phe 305 310 315 . 320 Asn Pro Lys Ala Gln Leu Val Leu Val Gly Ala Thr Phe Pro Glu Val • 325 330 335 <210> 1529 <211> 336 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (224) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1529 Met Ala Leu Ala Arg Pro Val Arg Leu Phe Ser Leu Val Thr Arg Leu 1 5 10 15 Leu Leu Ala Pro Arg Arg Gly Leu Thr Val Arg Ser Pro Asp Glu Pro 20 25 30 Leu Pro Val Val Arg Ile Pro Val Ala Leu Gln Arg Gln Leu Glu Gln 35 40 45 Arg Gln Ser Arg Arg Arg Asn Leu Pro Arg Pro Val Leu Val Arg Pro 50 55 60 Gly Pro Leu Leu Val Ser Ala Arg Arg Pro Glu Leu Asn Gln Pro Ala 70 65 · . 75 80 Arg Leu Thr Leu Gly Arg Trp Glu Arg Ala Pro Leu Ala Ser Gln Gly 85 90 . Trp Lys Ser Arg Arg Ala Arg Arg Asp His Phe Ser Ile Glu Arg Ala 100 . 105 110 Gln Gln Glu Ala Pro Ala Val Arg Lys Leu Ser Ser Lys Gly Ser Phe 120 115 125 Ala Asp Leu Gly Leu Glu Pro Arg Val Leu His Ala Leu Gln Glu Ala 130 135 140 • 932

Ala Pro Glu Val Val Gln Pro Thr Thr Val Gln Ser Ser Thr Ile Pro Ser Leu Leu Arg Gly Arg His Val Val Cys Ala Ala Glu Thr Gly Ser. Gly Lys Thr Leu Ser Tyr Leu Leu Pro Leu Leu Gln Arg Leu Leu Gly Gln Pro Ser Leu Asp Ser Leu Pro Ile Pro Ala Pro Arg Gly Leu Val Leu Val Pro Ser Arg Glu Leu Ala Gln Gln Val Arg Ala Val Ala Xaa Pro Leu Gly Arg Ser Leu Gly Leu Leu Val Arg Asp Leu Glu Gly Gly His Gly Met Arg Arg Ile Arg Leu Gln Leu Ser Arg Gln Pro Ser Ala Asp Val Leu Val Ala Thr Pro Gly Ala Leu Trp Lys Ala Leu Lys Ser Arg Leu Ile Ser Leu Glu Gln Leu Ser Phe Leu Val Leu Asp Glu Ala . Asp Thr Leu Leu Asp Glu Ser Phe Leu Glu Leu Val Asp Tyr Ile Leu Glu Lys Ser His Ile Ala Glu Gly Pro Ala Asp Leu Glu Asp Pro Phe Asn Pro Lys Ala Gln Leu Val Leu Val Gly Ala Thr Phe Pro Glu Val 

<210> 1530 <211> 93 <212> PRT <213> Homo sapiens <400> 1530 Met Ser Phe Arg Ser Glu Leu Ala Met Trp Phe Gln Ala Ala Leu Val Ser Ser Leu Val Leu Pro Thr Pro Pro Gly Ser Gly Gly Thr Ser Arg Arg Lys Lys Trp Ile Lys Ser Trp Arg Asp Phe Lys Gln Tyr Leu Thr His Ser Ser Arg His Asp Ser His Gln Leu Arg Ser Ser Asn Ala Phe 

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Leu Phe Asp Ala Gln Glu Asp Pro Ser Ala Leu Asp Ile Ala Ser Pro 65 70 75 80 Gly Gly Met Ala Ala Glu Asp Glu Ile Gln Arg Gln Arg 85 90 <210> 1531 <211> 219 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (41) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1531 Ala Ala Ala Thr Ala Ala Ser Leu Ser Pro Arg Gly Cys Arg Leu Arg 1 5 10 15 Thr Pro Ser Ser Asp Val Ser Pro Ser Arg Ala Pro Pro Pro Ser Ala 20 25 30 Ala Pro Leu Pro Thr Gly Arg Ala Xaa Met Ser Pro Ser Gly Arg Leu 35 40 45 Cys Leu Leu Thr Ile Val Gly Leu Ile Leu Pro Thr Arg Gly Gln Thr 50 55 . 60 Leu Lys Asp Thr Thr Ser Ser Ser Ser Ala Asp Ser Thr Ile Met Asp 65 70 75 80 Ile Gln Val Pro Thr Arg Ala Pro Asp Ala Val Tyr Thr Glu Leu Gln . 90 85 95 Pro Thr Ser Pro Thr Pro Thr Trp Pro Ala Asp Glu Thr Pro Gln Pro . 105 100 110 . Gln Thr Gln Thr Gln Gln Leu Glu Gly Thr Asp Gly Pro Leu Val Thr . 115 . 120 · 125 Asp Pro Glu Thr His Lys Ser Thr Lys Ala Ala His Pro Thr Asp Asp 130 135 140 Thr Thr Leu Ser Glu Arg Pro Ser Pro Ser Thr Asp Val Gln Thr 145 150 . 155 160 Asp Pro Gln Thr Leu Lys Pro Ser Gly Phe His Glu Asp Asp Pro Phe 165 170 175 Phe Tyr Asp Glu His Thr Leu Arg Lys Arg Gly Leu Leu Val Ala Ala 180 185 190 Val Leu Phe Ile Thr Gly Ile Ile Ile Leu Thr Ser Gly Lys Cys Arg 195 200 205 Gln Leu Ser Arg Leu Cys Arg Asn His Cys Arg . 210 215

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Asp Ser Ile Asp Ala Ile Ser Met Phe Leu Gly Gly Leu Leu Ala Thr . Ile Phe Leu Asp Ile Val His Ile Ser Ile Phe Tyr Pro Arg Val Ser Leu Thr Asp Thr Gly Arg Phe Gly Val Gly Met Ala Ile Leu Ser Leu Leu Leu Lys Pro Leu Ser Cys Cys Phe Val Tyr His Met Tyr Arg Glu · 100 Arg Gly Gly Phe Leu Gly Ser Ser Gln Asp Arg Ser Ala Tyr Gln Thr Ile Asp Ser Ala Glu Ala Pro Ala Asp Pro Phe Ala Val Pro Glu Gly Arg Ser Gln Asp Ala Arg Gly Tyr <210> 1534 <211> 159 <212> PRT <213> Homo sapiens <400> 1534 Met Glu Leu Pro Ala Val Asn Leu Lys Val Ile Leu Leu Gly His Trp Leu Leu Thr Thr Trp Gly Cys Ile Val Phe Ser Gly Ser Tyr Ala Trp Ala Asn Phe Thr Ile Leu Ala Leu Gly Val Trp Ala Val Ala Gln Arg . Asp Ser Ile Asp Ala Ile Ser Met Phe Leu Gly Gly Leu Leu Ala Thr Ile Phe Leu Asp Ile Val His Ile Ser Ile Phe Tyr Pro Arg Val Ser . 80 Leu Thr Asp Thr Gly Arg Phe Gly Val Gly Met Ala Ile Leu Ser Leu 85 . Leu Leu Lys Pro Leu Ser Cys Cys Phe Val Tyr His Met Tyr Arg Glu Arg Gly Gly Glu Leu Leu Val His Thr Gly Phe Leu Gly Ser Ser Gln 125 . Asp Arg Ser Ala Tyr Gln Thr Ile Asp Ser Ala Glu Ala Pro Ala Asp Pro Phe Ala Val Pro Glu Gly Arg Ser Gln Asp Ala Arg Gly Tyr . 

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Gln Val Val Gln Ala Arg Leu Glu Val Pro Val Phe Lys Gln Arg Asp 20 25 30 . Leu Cys Asn Tyr Val Leu Ile Leu Val Gly Ala Gln Leu Lys Pro Leu 35 40 45 Ala Met Leu Val Lys Asn Ile Arg Asp Tyr Arg Leu Glu Pro Pro Cys 50 55 60 Pro Ala Cys Ile Asp Thr Phe Tyr Pro Thr Phe Lys Thr Gly Met Phe 70 65 75 80 Ser Leu Cys Phe Lys Met Pro Leu Lys Tyr Phe 85 90 <210> 1538 <211> 112 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (93) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (98) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (104) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE. <222> (106) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1538 Met Asp Leu Trp Thr Thr Ser Phe Phe Phe Ala Val Met His Asn 1 5 10 15 Ala Ala Met Asn Ile Asn Val Gln Val Ser Glu Ser Gly Phe Ser Phe . 20 25 30 Trp Gly Arg Tyr Leu Gly Val Glu Leu Leu Gly Cys Val Val Asn Leu 45 · 35 40 Tyr Leu Phe Lys Lys Trp Pro Asn Cys Phe Leu Asn Gly Cys Ile Ile 50 55 60 Leu His Pro His Gln Gln Tyr Ile Arg Val Ser Cys Phe Ser Thr Ser 65 70 75 80 Tyr Leu Leu Met Ala Phe Lys Asn Tyr Arg His Ser Xaa Lys Cys Glu

95

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85

Val Xaa Pro His Cys Ser Leu Xaa Cys Xaa Phe Leu Ile Thr Met Met 100 105 110

90

<210> 1539 <211> 113 <212> PRT <213> Homo sapiens <400> 1539 Met Asp Leu Trp Thr Thr Ser Phe Phe Phe Phe Ala Val Met His Asn 5 • 10 15 1 Ala Ala Met Asn Ile Asn Val Gln Val Ser Glu Ser Gly Phe Ser Phe 20 25 30 . Trp Gly Arg Tyr Leu Gly Val Glu Leu Leu Gly Cys Val Val Asn Leu 35 40 45 . Tyr Leu Phe Lys Lys Trp Pro Asn Cys Phe Leu Asn Gly Cys Ile Ile 50 55 60 Leu His Pro His Gln Gln Tyr Ile Arg Val Ser Cys Phe Ser Thr Ser 65 70 75 80 c Tyr Leu Leu Met Ala Phe Lys Asn Tyr Arg His Ser Cys Lys Cys Glu 85 90 95 Val Val Ser His Cys Ser Phe Ser Leu His Phe Pro Asn Asn Asn Asp 100 105 110 Val <210> 1540 <211> 113 <212> PRT <213> Homo sapiens <400> 1540 Met Asp Leu Trp Thr Thr Ser Phe Phe Phe Phe Ala Val Met His Asn - 5 1 10 15 . Ala Ala Met Asn Ile Asn Val Gln Val Ser Glu Ser Gly Phe Ser Phe 20 25 30 Trp Gly Arg Tyr Leu Gly Val Glu Leu Leu Gly Cys Val Val Asn Leu 35 40 45 Tyr Leu Phe Lys Lys Trp Pro Asn Cys Phe Leu Asn Gly Cys Ile Ile 55 · 50 60

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Leu His Pro His Gln Gln Tyr Ile Arg Val Ser Cys Phe Ser Thr Ser 65 • 70 75 80 Tyr Leu Leu Met Ala Phe Lys Asn Tyr Arg His Ser Cys Lys Cys Glu 85 90 95 Val Val Ser His Cys Ser Phe Ser Leu His Phe Pro Asn Asn Asn Asp 100 105 110 Val <210> 1541 <211> 111 <212> PRT <213> Homo sapiens <400> 1541 Met Arg Met Ser Leu Ala Asp Ser Leu Ala Cys Ser Val Cys Val Ala 5 1 10 . 15 Leu Thr Ala Ala Ala Arg Leu Leu Arg Ser Arg Pro Ser Ser Cys Ser 20 25 30 . Ser Phe Ser Trp Ile Ser Gly Thr Ser Ser Ser Pro Ser Phe Leu Gly 35 40 . 45 Ser Phe Thr Ser Leu Leu Gly Ser Ser Leu Ser Ser Leu Gly Asp Ser 50 55 60 Leu Leu Gly Arg Gly Thr Leu Gly Asn Phe Trp Glu Val Leu Ile Ser 65 70 75 80 Thr Ser Thr Ser Ser Trp Ala Asp Phe Ser Ser Leu Val Ser Thr Ser 85 90 · 95 Pro Lys Val Arg Val Pro Leu Arg Pro Ile Phe Thr Cys Phe Leu 100 105 110 <210> 1542 <211> 148 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221>,SITE <222> (37) · <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

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<210> 1544 <211> 165 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids.

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<210> 1545 <211> 303 <212> PRT <213> Homo sapiens

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Gly Gln Arg Lys Gln Tyr Gly Gly Asp Phe Leu Arg Ala Arg Met Ser 130 135 140 Ser Pro Ala Léu Thr Ala Gly Ala Ser Gly Lys Val Met Asp Phe Asn 145 150 155 160 Asn Gly Thr Tyr Leu Val Ser Phe Thr Leu Phe Trp Glu Gly Gln Xaa 165 170 175 Xaa Leu Xaa Leu Leu Leu Ile His Pro Ser Glu Gly Ala Ser Ala Xaa ·185 180 190 Trp Arg Ala Arg Asn Gln Gly Tyr Asp Lys Ile Ile Phe Lys Gly Lys 195 200 205 Phe Val Asn Gly Thr Ser His Val Phe Thr Glu Cys Gly Leu Thr Leu 210 215 220 Asn Ser Asn Ala Glu Leu Cys Glu Tyr Leu Asp Asp Arg Asp Gln Glu 225 230 235 240 Ala Phe Tyr Cys Met Lys Pro Gln His Met Pro Cys Glu Ala Leu Thr 245 250 255 Tyr Met Thr Thr Arg Asn Arg Glu Val Ser Tyr Leu Thr Asp Lys Glu 265 260 270 . ..... ...... Asn Ser Leu Phe His Arg Ser Lys Val Gly Val Glu Met Met Lys Asp 275 280 285 Arg Lys His Ile Asp Xaa Thr Asn Xaa Asn Lys Arg Glu Xaa Ile 290 295 · 300

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Lys Leu Trp Ser Ala Leu Asn Leu Ser Ile Ser Val His Tyr Trp Asn

<sup>· 945</sup> 

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		35					40					45			
Asn	Ser 50	Ala	Lys	Ser	Leu	Phe 55	Pro	Lys	Thr	Ser	Leu 60	Ile	Pro	Leu	Lys
Pro 65	Leu	Thr	Glu	Thr	Glu 70	Leu	Arg	İle	Lys	Glu 75	Ile	Ile	Glu	Lys	Leu 80
Asp	Gln	Gln	Ile	Pro 85	Pro	Arg	Pro	Phe	Thr 90	His	Val	Asn	Thr	Thr 95	Thr
Ser	Ala	Thr	His 100	Ser	Thr	Ala	Thr	Ile 105	Leu	Asn	Pro	Arg	Asp 110	Thr	Tyr
	Arg	115					120					125			
	Gln 130					135					140	•			
145	Pro				150					155					160
	Gly			165					170					175	
	Leu		180					185		•			190		
	Arg	195		•			200					205			
	Val 210					215				·	220				
225	Ser				230					235					240
	Phe			245					250					255	
	Met Ser		260					265					270	-	
	Lys	275		-		•	280					285		_	
	290 Thr					295				·	300			•	
.305	Gln				310					315					320
	Ile			325			•		330					335	
	Asp		340.					345					350.		
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		355					360					365			
Lys	Thr 370	Leu	Lys	Phe	Phe ,	Asp 375	Leu	His	Glu	Thr	Gly 380	Ile	Phe	Lys	Lys
His 385	Leu	Leu	Leu	Asp	Ala 390	Glu	Arg	His	Thr	Gln 395	Ile	Gln	Trp	Lys	Lys 400
His	Ser	Tyr	Pro	Phe 405	Val	Thr	Phe	Gln	Leu 410	Tyr	Ser	Leu	Ile	Asp 415	His
Asp	Tyr	Ile	Pro 420	Arg	Glu	Ile	Asp	Arg 425	Leu	Ser	Gly	Asp	Lys 430	Asn	Thr
Ala	Ile	Val 435	Ile	Thr	Phe	Gly	Gln 440	His	Phe	Arg	Pro	Phe 445	Pro	Ile	Asp
lle	Phe 450 <sub>.</sub>		Arg	Arg	Ala	Ile 455	Gly	Val	Gln	Lys	Ala 460	Ile	Glu	Arg	Leu
Phe `465	Leu	Arg	Ser	Pro	Ala 470	Thr	Lys	Val	Ile	Ile 475	Lys	Thr	Glu	Asn	Ile 480
Arg	Glu	Met	His	Ile 485	Glu	Thr	Glu	Arg	Phe 490	Gly	Asp	Phe	His	Gly 495	Tyr
Ile	His	Tyr	Leu 500	Ile	Met	Lys	Asp	Ile 505	Phe	Lys	Asp	Leu	Asn 510	Val	Gly
Ile	Ile	Asp 515	Ala	Trp	Asp	Met	Thr 520	Ile	Ala	Tyr	Gly	Thr 525	Asp	Thr	Ile
His	Pro 530	Pro	Asp	His	Val	Ile 535	Gly	Asn	Gln	Ile	Asn 540	Met	Phe	Leu	Asn
Tyr 545	Ile	Cys				. •									·

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<210> 1549 <211> 473 <212> PRT · <213> Homo sapiens

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225		230				235	. ·				240	
Arg Gln Leu i	Pro His 245	Leu Thr	Leu	Ala	Arg 250	Asp	Thr	Leu	His	Phe 255	Leu	
Ala Leu Arg	Trp Gly 260	His Ile	Arg	Leu 265	Pro	Ala	Ser	Gly	Pro 270	Arg	Asp	
Thr Ala Thr 1 275	Leu Phe	Ser Thr	Leu 280	Asp	Thr	Gln	Leu	Leu 285	Met	Thr	Leu	
Tyr Val Gly 1 290	Lys Asp	Glu Thr 295	Gly	Phe	Tyr	Val	Ser 300	Lys	Ala	Leu	Val	
His Thr Gly V 305	Val Ala	Leu Val 310	Pro	Arg	Gly	Leu 315	Thr	Leu	Ala	Pro	Ala 320	
Xaa Gly Pro S	Thr Thr 325	Asp Glu	Val	Thr	Leu 330	Gln	Val	Ser	Gly	Glu 335	Arg	
Glu Gly Ser I	Pro Ser 340	Thr Ala	Val	Arg 345	Tyr	Pro	Ser	Gly	Ser 350	Val	Ala	
Leu Pro Ser ( 355	3ln Trp	Leu Leu	Ile 360	GİY	His	His	Glú	Leu 365	Pro	Pro	Val	
Leu His Thr 1 370	Thr Met	Leu Arg 375	Val	His	Pro	Thr	Leu 380	Gly	Ser	Gly	Thr	
Ala Xaa Thr A 385	Arg Pro	Pro Xaa 390	Asn	Thr	Gln	Ala 395	Pro	Ala	Phe	Phe	Leu 400	
Glu Leu Leu S	Ser Leu 405	Ser Arg	Glu	Lys	Leu 410	Trp	Asp	Ser	Glu	Leu 415	His	
Pro Glu Glu I	Lys Thr 120	Pro Asp	Ser	Tyr 425	Leu	Gly	Leu	Gly	Pro 430	Gln	Asp	
Leu Leu Ala A 435	Ala Ser	Leu Thr	Ala 440	Val	Leu	Leu	Gly	Gly 445	Trp	Ile	Leu	
Phe Val Met A 450	Arg Gln	Gln Gln 455	Pro	Gľn	Val	Val	Glu 460	Lys	Gln	Gln	Glu	
Thr Pro Leu A 465	Ala Pró	Ala Ala 470	Trp	Gly								
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His Glu Pro Gly Asp Pro Arg Gly Gly Ser Ile Trp Asp Glu Pro Pro 35 40 45 Pro Pro Asn Ala Gln Ala Ser Pro Gln Asp Pro Gly Gly Gly His His 50 55 60 Ser Gly Lys Pro Gly Val Gly Val Gly Phe Gly Leu Ser Thr Phe Leu 65 70 75 80 Leu Gln Ile Pro Pro Thr His Pro Ser Pro Lys Ser Ser Pro Leu Ala · 85 90 95 Leu Ala <210> 1551 <211> 98 <212> PRT <213> Homo sapiens <400> 1551 Met Cys Met Arg Leu Cys Ala Ala Leu Leu Pro Ala Pro Cys Thr Leu 5 1 10 15 Arg Ala Ser Trp Gly Val Arg Gly Ala Gln Trp Gly Phe Ser Ser Leu 20 25 . 30 . His Glu Pro Gly Asp Pro Arg Gly Gly Ser Ile Trp Asp Glu Pro Pro . 35 40 45 Pro Pro Asn Ala Gln Ala Ser Pro Gln Asp Pro Gly Gly Gly His His 50 55 60 Ser Gly Lys Pro Gly Val Gly Val Gly Phe Gly Leu Ser Thr Phe Leu 65 70 75 80 Leu Gln Ile Pro Pro Thr His Pro Ser Pro Lys Ser Ser Pro Leu Ala - 85 90 . 95 Leu Ala . <210> 1552 <211> 94 <212> PRT <213> Homo sapiens <400> 1552 Met Gly Val Leu Trp Tyr Thr Phe Trp Tyr Thr Phe Thr Leu Leu Glu , 1 5 10 15 Cys Ser Arg Ser Ser Asn Asp Ser Arg Thr Leu Val Leu Ile Cys Leu 20 25 30 .

Ser Leu Leu Gly Phe Asp Phe Val Arg Val Leu Asn Ile Lys Leu Ala

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35 40 45 Val Gly Glu Ser Thr Leu His Met Leu Ser Leu Pro Phe Ser Leu Arg 50 55 60 Leu Ser Pro Ala Leu Pro Phe Ser Pro Phe Leu Leu Met Asn Lys 65 70 75 80 Pro Leu Ser Asp Val Gln Tyr Phe Asn Leu His Phe Ala Gly 85 90 <210> 1553 <211> 49 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1553 Xaa Xaa Tyr Asp Glu Lys Leu Ile Phe Ile Gln Ile Leu Gln Thr Lys 1 5 10 15 Ala Thr Asp Lys Tyr Ser Glu Gln Val Ser Gln Val Gly Pro Gly Ala 20 25 30 Val Leu Thr Pro Val Ile Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly 35 40 45 . Ser , . · <210> 1554 <211> 141 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (140) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1554 Met Gly Pro Arg Gly Cys Ala Leu Ala His Ser Leu Leu Pro Leu Leu 1 5 10 15 Cys Gln His Val Trp Thr Ser Pro Arg Tyr Cys Arg Gln Cys Thr Arg 20 25 · 30

Glu Pro Arg His Cys Cys Pro Ala Pro Ala Ser Ala Gly Val Gln Tyr 35 40 45 Met Cys Ala Tyr Gly Cys His His Pro Thr Phe Ala Gly Val Tyr Thr 50 55 60 Pro Ser His Thr Thr Val Ala Thr Ser Ile Cys Thr Gln Thr Pro Pro 65 70 75 80 His Gln Cys Cys Trp Ser Glu His Thr His Val Val Ser Thr Thr Pro 85 90 95 Leu Leu Pro Ala Tyr Met His Met Ser Met Asp Pro Ala Ala Thr Thr 100 105 110 Gln Met Lys Cys Phe Cys Arg His Pro Ile Arg Ala Phe Leu Pro Val 115 120 • , 125 Glu Trp Glu His Leu Ser Pro Phe Asn Thr Ala Xaa Ala 130 135 140 <210> 1555 <211> 141 <212> PRT <213> Homo sapiens <400> 1555 Met Gly Pro Arg Gly Cys Ala Leu Ala His Ser Leu Leu Pro Leu Leu 5 10 Cys Gln His Val Trp Thr Ser Pro Arg Tyr Cys Arg Gln Cys Thr Arg 20 25 30 Glu Pro Arg His Cys Cys Pro Ala Pro Ala Ser Ala Gly Val Gln Tyr 35 40 · 45 Met Cys Ala Tyr Gly Cys His His Pro Thr Phe Ala Gly Val Tyr Thr. 50 55 60 ' Pro Ser His Thr Thr Val Ala Thr Ser Ile Cys Thr Gln Thr Pro Pro 65 70 75 80 His Gln Cys Cys Trp Ser Glu His Thr His Val Val Ser Thr Thr Pro 85 90 . 95 . . . Leu Leu Pro Ala Tyr Met His Met Ser Met Asp Pro Ala Ala Thr Thr . 100 105 110 Gln Met Lys Cys Phe Cys Arg His Pro Ile Arg Ala Phe Leu Pro Val 115 120 125 Glu Trp Glu His Leu Ser Pro Ser Asn Thr Ala Gly Ala 130 135 140

<210> 1556 <211> 93

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<212> PRT <213> Homo sapiens <400> 1556 Met Ile Val Asn Ile Ser His Glu Ile Trp Trp Phe Tyr Lys Gly Lys 1 5 10 15 Val Pro Leu His Met Leu Thr Cys Leu Leu Pro Cys Lys Thr Cys Leu 20 . 25 30 Ala Pro Pro Ser Pro Ser Ser Val Thr Val Arg Pro Pro Gln Pro Cys 35 40 45 Glu Thr Val Ser Pro Leu Lys Leu Phe Phe Phe Ile Asn Tyr Pro Val 55 60 50 Leu His Met Ser Leu Leu Thr Val Arg Lys Trp Thr Asn Thr Leu Gly 65 70 75 80 His Glu Gly Gly Ala Leu Ile Asn Gly Ile Ser Ala Leu · 85 90 <210> 1557 <211> 59 <212> PRT <213> Homo sapiens <400> 1557 Glu Glu His Gly Ile Thr Ser Val Ile Phe Leu Pro Gln Val His Asn -1 5 10 15 Leu Asn Leu Ile Ile Arg Lys His Gln Thr Asn Pro Asn Gln Glu Thr 20<sup>,</sup> 25 30 Leu Tyr Lys Ile Met Thr Cys Asp Pro Gln Asn Leu Gln Gly His Glu 35 . 40 45 Gln Gln Gly Lys Thr Glu Asp Lys Cys Thr Val 50 55 <210> 1558 <211> 93 <212> PRT <213> Homo sapiens <400> 1558 Met Ile Val Asn Ile Ser His Glu Ile Trp Trp Phe Tyr Lys Gly Lys 1 5 10 15 Val Pro Leu His Met Leu Thr Cys Leu Leu Pro Cys Lys Thr Cys Leu 20 25 30 . Ala Pro Pro Ser Pro Ser Ser Val Thr Val Arg Pro Pro Gln Pro Cys 35 40 45 . . Glu Thr Val Ser Pro Leu Lys Leu Phe-Phe Phe Ile Asn Tyr Pro Val

· 55 50 60 Leu His Met Ser Leu Leu Thr Val Arg Lys Trp Thr Asn Thr Leu Gly 65 70 75 80 His Glu Gly Gly Ala Leu Ile Asn Gly Ile Ser Ala Leu 85 90 <210> 1559 <211> 100 <212> PRT <213> Homo sapiens <220> ·. <221> SITE <222> (62) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221>,SITE <222> (85) <223> Xaa equals any of the naturally occurring L-amino acids <220> · · , <221> SITE <222> (88) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (95) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (99) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1559 4 Met Leu Leu Gln Arg Thr Arg Phe Leu Leu Leu Phe Phe Ser Phe Val 1 . 5 · 10 15 Ser Ser Phe Phe Leu Ser Leu Pro Ser Phe Ser Leu Phe Phe Leu Phe 20 25 .30 Leu Ser Leu Ser Leu Phe Cys Ile His Val Ala Ala Lys Asp Met Ile 35 -40 45 Ser Ser Phe Phe Ser Leu Pro Phe Ser Phe Leu Ser Phe Xaa Leu Ser 55 50 60 Phe Leu Leu Pro Ser Phe Ser Phe Phe Tyr Phe Phe Phe Phe Trp Leu 65、 70 75 80 Ser Phe Phe Phe Xaa Ser Lys Xaa Leu Ala Leu Val Pro Lys Xaa Gly 85 , 90 95 • 、

Met Gln Xaa Val

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100

<210> 1560 <211> 87 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (71) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (86) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1560 Met Val Val Met Ala Ser Leu Gln Val Glu Pro Ala Val Gly Lys Glu 1 5 10 15 Gln Leu Arg Glu Arg Gln Gly Pro Glu Leu Leu Gly Trp Val Ala Gly. -20 25 30 Leu Ala Phe Val Cys Leu Phe Ala Cys Val Gly Val Gly Val Ala Pro 35 40 45 Cys His Ser Phe Asp Ser Glu Ala Ala Ser Phe Leu Leu Leu Tyr Ser 55 50 60 . • Trp Cys Thr Pro Arg Leu Xaa Ser Trp Leu Arg Asp Thr Pro Ser Pro 65 70 75 80 . Leu Ala Ser Gly Thr Xaa Pro 85 <210> 1561 <211> 49 <212> PRT <213> Homo sapiens <400> 1561 Val Arg Ala Met Phe Gly Phe Leu Ala Cys Val Ser Ser Leu Arg Val • 1 5 10 15 Met Ala Ser Ser Ser Ser His Val Thr Ser Glu Asp Met Ile Leu Phe 20 30 25 Leu Ile Ser Cys Gly Ile Tyr Val Pro His Phe Leu Tyr Pro Val Asp 35 • . 40 45 Arg

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<210> 1562 <211> 168 <212> PRT <213> Homo sapiens <400> 1562 Met Val Val Met Ala Ser Leu Gln Val Glu Pro Ala Val Gly Lys Glu 1 5 10 15 Gln Leu Arg Glu Arg Gln Gly Pro Glu Leu Leu Gly Trp Val Ala Gly 20 25 30 Leu Ala Phe Val Cys Leu Phe Ala Cys Val Gly Val Gly Val Ala Pro 35 40 45 - , Cys His Ser Phe Asp Ser Glu Ala Ala Ser Phe Leu Leu Leu Tyr Ser 50 55 60 Trp Cys Thr Pro Arg Leu Leu Ser Trp Leu Arg Asp Thr Pro Ser Pro · 75 65 70 80 Leu Ala Ser Gly Thr Phe Pro Pro His Ser Pro Leu Gly Glu Arg Pro 85 90 95 Leu Leu Ser Gly Pro Pro Ser Ser Gln Gln Leu Leu Val Val Gly 100 105 ·110 Pro Cys Ala Leu Arg Phe Val Gly Ala Arg His Val Lys Thr Ala Gly 115 120 125 Phe Arg Asp Gly Phe Ser Leu Pro Ser Ser Ser Val Phe Ser Glu Phe · 140 . 130 135 . Trp Lys Met Thr Leu Leu Glu Ala Pro Leu Leu Cys His Leu Ser Ser 145 150 155 160 Lys Ser Gly Ala Ser Ala Cys Trp 165 <210> 1563 <211> 200 . <212> PRT <213> Homo sapiens <220> <221> SITE <222> (140) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

<222> (155) <223> Xaa equals any of the naturally occurring L-amino acids

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<210> 1564 <211> 100

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<212> PRT <213> Homo sapiens . <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (57) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222>`(62) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (80) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1564 Met Ala Xaa Tyr Val Gly Met Leu Arg Leu Gly Xaa Leu Cys Ala Gly 1 . 5 . 10 15 Ser Ser Gly Val Leu Gly Ala Arg Ala Ala Leu Ser Arg Ser Trp Gln 20 25 30 Glu Ala Arg Leu Gln Gly Val Arg Phe Leu Ser Ser Arg Glu Val Gly 35 . -· 40 45 Ser His Gly Leu His Ala His Arg Xaa Ala Ser Ala Thr Xaa Arg Gly . 50 55 60 Ala Pro Lys Ser Ile Leu Thr Ala Arg Leu Trp Ala Ser Ala Trp Xaa 65 70 75 80 Pro Gln His Arg Gly Ser Gln Asn Glu Arg Pro Trp Ser Ser Met 85 90 95 Lys Thr Ser Gly 100 <210> 1565 <211> 461 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (424)

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275		280	285	
Glu Arg Leu Lys 290	Leu His Glu 295		lu Gln Leu Arg 300	Met Ile
Leu Pro Asn Pro 305	Leu Tyr His 310		er Val Ala Gly	Thr Met 320
Met Cys Leu Met	Tyr Gly Ala 325	. Thr Leu Ile L 330	eu Ala Ser Pro	Ile Phe 335
Asn Gly Lys Lys 340	Ala Leu Glu	Ala Ile Ser A 345	rg Glu Arg Gly 350	Thr Phe
Leu Tyr Gly Thr 355	Pro Thr Met	Phe Val Asp I 360	le Leu Asn Gln 365	Pro Asp
Phe Ser Ser Tyr 370	Asp Ile Ser 375		ly Gly Val Ile 380	Ala Gly
Ser Pro Ala Pro 385	Pro Glu Leu 390		le Ile Asn Lys 95	Ile Asn 400
Met Lys Asp Leu	Val Val Ala 405	Tyr Gly Thr T 410	hr Glu Asn Ser	Pro Val 415
Thr Phe Ala His 420	Phe Pro Glu	Xaa Thr Pro L 425	ys Pro Leu Asp 430	Lys Glu
Lys Arg Ala Glu 435	Tyr Ala Ser	His Gly Gly G 440	lu Pro Leu Thr 445	Lys Thr
Ser Lys Ser His 450	Leu Pro Ser 455		aa Gly Ser 460	
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<220> <221> SITE <222> (121) <223> Xaa equals	s any of the	naturally occ	urring L-amino	acids
<220> <221> SITE <222> (122) <223> Xaa equal	s any of the	naturally occ	urring L-amino	acids
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Phe Tyr Leu Pro ·20	Leu Val Val	Thr Thr Pro L 25	ys Thr Leu Ala 30	Ile Pro

Glu Lys Leu Gln Glu Ala Val Gly Lys Val Ile Ile Asn Ala Thr Thr

35		40	45	
Cys Thr Val Thr 50	Cys Gly Leu 55	Gly Tyr Lys	Glu Glu Thr Val 60	Cys Glu <sub>.</sub>
Val Gly Pro Asp 65	Gly Val Arg 70	Arg Lys Cys	Gln Thr Arg Arg 75	Leu Glu 80
Cys Leu Thr Asn	Trp Ile Cys 85	Gly Met Leu 90	His Phe Thr. Ile	Leu Ile 95
Gly Lys Glu Phe 100	Glu Leu Ser	Cys Leu Ser 105	Ser Asp Ile Leu 110	Glu Phe
Gly Gln Glu Ala 115	Phe Arg Phe	Thr Xaa Xaa 120	Leu Ala Arg Gly 125	Val Ile
Ser Thr Asp Asp 130	Glu Val Phe 135	Lys Pro Phe	Gln Ala Asn Ser 140	His Phe
Val Lys Phe Lys 145	Tyr`Ala Gln 150	Glu Tyr Asp	Ser Gly Thr Tyr 155	Arg Cys 160
Asp Val Gln Leu	Val Lys Asn 165	Leu Arg Leu 170	Val Lys Ser Ser	Ile Leu 175

Gly

<210> 1567 <211> 255 <212> PRT. <213> Homo sapiens <400> 1567 د Met Lys Val Leu Ala Thr Ser Phe Val Leu Gly Ser Leu Gly Leu Ala 1 · 5 10 15 Phe Tyr Leu Pro Leu Val Val Thr Thr Pro Lys Thr Leu Ala Ile Pro 20 25 🖞 30 Glu Lys Leu Gln Glu Ala Val Gly Lys Val Ile Ile Asn Ala Thr Thr 35 40 45 Cys Thr.Val Thr Cys Gly Leu Gly Tyr Lys Glu Glu Thr Val Cys Glu 55 · 50 60 Val Gly Pro Asp Gly Val Arg Arg Lys Cys Gln Thr Gln Arg Leu Glu 65 70 75 80 Cys Leu Thr Asn Trp Ile Cys Gly Met Leu His Phe Thr Ile Leu Ile 85 90 95 Gly Lys Glu Phe Glu Leu Ser Cys Leu Ser Ser Asp Ile Leu Glu Phe 105 · 100 110 Gly Gln Glu Ala Phe Arg Phe Thr Trp Arg Leu Ala Arg Gly Val Ile 115 120 125

Ser Thr Asp Asp Glu Val Phe Lys Pro Phe Gln Ala Asn Ser His Phe 135 130 140 Val Lys Phe Lys Tyr Ala Gln Glu Tyr Asp Ser Gly Thr Tyr Arg Cys 145 150 155 160 Asp Val Gln Leu Val Lys Asn Leu Arg Leu Val Lys Arg Leu Tyr Phe 165 170 175 Gly Leu Arg Val Leu Pro Pro Asn Leu Val Asn Leu Asn Phe His Gln 180 185 190 Ser Leu Thr Glu Asp Gln Lys Leu Ile Asp Glu Gly Leu Glu Val Asn , 195 200 205 Leu Asp Ser Tyr Ser Lys Pro His His Pro Lys Trp Lys Lys Val 210 215 220 Ala Ser Ala Leu Gly Ile Gly Ile Ala Ile Gly Val Val Gly Gly Val 225 230 235 240 Leu Val Arg Ile Val Leu Cys Ala Leu Arg Gly Gly Leu Gln Gln 245 250 255

<210> 1568 <211> 255 <212> PRT <213> Homo sapiens <400> 1568 Met Lys Val Leu Ala Thr Ser Phe Val Leu Gly Ser Leu Gly Leu Ala 5 1 10 15 Phe Tyr Leu Pro Leu Val Val Thr Thr Pro Lys Thr Leu Ala Ile Pro 20 25 30 Glu Lys Leu Gln Glu Ala Val Gly Lys Val Ile Ile Asn Ala Thr Thr 35 40 . 45 Cys Thr Val Thr Cys Gly Leu Gly Tyr Eys Glu Glu Thr Val Cys Glu 50 55 60 Val Gly Pro Asp Gly Val Arg Arg Lys Cys Gln Thr Arg Arg Leu Glu 70 75 . 80 • 65 Cys Leu Thr Asn Trp Ile Cys Gly Met Leu His Phe Thr Ile Leu Ile 85 90 95 Gly Lys Glu Phe Glu Leu Ser Cys Leu Ser Ser Asp Ile Leu Glu Phe 100 105 110 Gly Gln Glu Ala Phe Arg Phe Thr Trp Arg Leu Ala Arg Gly Val Ile 115 120 125 Ser Thr Asp Asp Glu Val Phe Lys Pro Phe Gln Ala Asn Ser His Phe 130 135 140

Val Lys Phe Lys Tyr Ala Gln Glu Tyr Asp Ser Gly Thr Tyr Arg Cys 145 150 155 160 Asp Val Gln Leu Val Lys Asn Leu Arg Leu Val Lys Arg Leu Tyr Phe 165 170 175 Gly Leu Arg Val Leu Pro Pro Asn Leu Val Asn Leu Asn Phe His Gln 180 185 190 Ser Leu Thr Glu Asp Gln Lys Leu Ile Asp Glu Gly Leu Glu Val Asn 195 . 200 205 Leu Asp Ser Tyr Ser Lys Pro His His Pro Lys Trp Lys Lys Val . 210 215 220 Ala Ser Ala Leu Gly Ile Gly Ile Ala Ile Gly Val Val Gly Gly Val 225 230 235 240 Leu Val Arg Ile Val Leu Cys Ala Leu Arg Gly Gly Leu Gln Gln 245 250 · 255 <210> 1569 <211> 52 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (46) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1569 Met Val Pro Ile Phe Leu Leu Lys Cys Leu Leu Leu His Val Pro Leu 1 5 . 10 15 Cys Met Ser Ser Asn Leu Ser Phe His Ser Ser His His Leu His Ile 20 25 30 Phe Leu Pro Ser Phe Ser Sér His Leu Pro Arg Pro Leu Xaa Ile Pro 40 45 · 35 Pro Leu Ser Pro 50 <210> 1570 <211> 1134 <212> PRT <213> Homo sapiens <400> 1570 Val Leu Phe Arg Pro Gln Ala Gln Arg Pro Pro Ser Cys Val Gly Gly 1 5 10 15 . Ser Ala Val Arg Arg Trp Gln Gly Gln Pro Gln Pro Gln Arg Pro Gly . 30 20 25 964

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Glu Glu Lys Ala Ala Ala Ala Ile Leu Gly Gly Pro Gly Gly Gly Glu Glu Glu Lys Glu Glu Gly Gly Gly Arg Ala Trp Leu Arg Leu Leu Glu Glu Leu Ala Ala Ala Arg Pro Gly Glu Pro Ala Leu Met Ser Ser Ser Pro Leu Ser Lys Lys Arg Arg Val Ser Gly Pro Asp Pro Lys Pro Gly Ser Asn Cys Ser Pro Ala Gln Ser Val Leu Ser Glu Val Pro Ser Val Pro Thr Asn Gly Met Ala Lys Asn Gly Ser Glu Ala Asp Ile Asp Glu Gly Leu Tyr Ser Arg Gln Leu Tyr Val Leu Gly His Glu Ala Met Lys Arg Leu Gln Thr Ser Ser Val Leu Val Ser Gly Leu Arg Gly Leu Gly . Val Glu Ile Ala Lys Asn Ile Ile Leu Gly Gly Val Lys Ala Val Thr Leu His Asp Gln Gly Thr Ala Gln Trp Ala Asp Leu Ser Ser Gln Phe . Tyr Leu Arg Glu Glu Asp Ile Gly Lys Asn Arg Ala Glu Val Ser Gln Pro Arg Leu Ala Glu Leu Asn Ser Tyr Val Pro Val Thr Ala Tyr Thr Gly Pro Leu Val Glu Asp Phe Leu Ser Gly Phe Gln Val Val Val Leu Thr Asn Thr Pro Leu Glu Asp Gln Leu Arg Val Gly Glu Phe Cys His 245. Asn Arg Gly Ile Lys Leu Val Val Ala Asp Thr Arg Gly Leu Phe Gly Gln Leu Phe Cys Asp Phe Gly Glu Glu Met Ile Leu Thr Asp Ser Asn Gly Glu Gln Pro Leu Ser Ala Met Val Ser Met Val Thr Lys Asp Asn Pro Gly Val Val Thr Cys Leu Asp Glu Ala Arg His Gly Phe Glu Ser . Gly Asp Phe Val Ser Phe Ser Glu Val Gln Gly Met Val Glu Leu Asn Gly Asn Gln Pro Met Glu Ile Lys Val Leu Gly Pro Tyr Thr Phe Ser 350 · .

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	Ile	Cys	Asp 355	Thr	Ser	Asn	Phe	Ser 360	Asp	Tyr	Ile	Arg	Gly 365	Gly	Ile	Val
	Ser	Gln 370	Val	Lys	Val	Pro	Lys 375		Ile	Ser	Phe	Lys 380	Ser	Leu	Val	Ala
	Ser 385	Leu	Ala	Glu	Pro	Asp 390	Phe	Val	Val	Thr	Asp 395	Phe	Ala	Lys	Phe	Ser 400
	Arg	Pro	Ala	Gln	Leu 405	His	Ile	Gly	Phe	Gln 410	Ala	Leu	His	Gln	Phe 415	Cys
	Ala	Gln	His	Gly 420	Arg	Pro	Pro	Arg	Pro 425	Arg	Asn	Glu	Glu	Asp 430	Ala	Ala
	Glu	Leu	Val 435	Ala	Leu	Ala	Gln	Ala 440	Val	Asn	Ala	Arg	Ala 445	Leu	Pro	Ala
	Val	Gln 450		Asn	Asn	Leu	Asp 455	Glu	Asp	Leu	Ile	Arg 460	Lys	Leu	Ala	Tyr
	Val 465	Ala	Ala	Gly	Asp	Leu 470	Ala	Pro	Ile	Asn	Ala 475	Phe	Ile	Gly	Gly	Leu 480
•	Ala	Ala	Gln	Glu	Val 485	Met	ŗ ,	Ala	Cys	Ser 490	Gly	Lys	Phe	Met	Pro 495	Ile
	Met	Gln	Trp	Leu 500	Tyr	Phe	Asp	Ala	Leu 505	Glu	Cys	Leu	Pro	Glu 510	Asp	Lys
	Glu	Val	Leu 515	Thr	Glu	Asp	Lys	Cys 520	Leu	Gln	Arg	Gln	Asn 525	Arg	Tyr	Asp
	Gly	Gln 530	Val	Ala	Val	Phe	Gly 535	Ser	Asp	Leu	Gln	Glu 540	Lys	Leu	Gly	Lys
	Gln 545	Lys	Tyr	Phe	Leu	Val 550	Gly	Ala	Gly	Ala	Ile 555	Gly	Cys	Glu	Leu	Leu 560
	Lys	Asn	Phe	Ala	Met 565	Ile	Gly	Leu	Gļy	Cys 570	Gly	Glu	Gly	Gly	Glu 575	Ile
	Ile	Val		Asp 580	Met	Asp	Thr	Ile	Glu 585	Lys	Ser	Asn	Leu	Asn 590	Arg	Gln
	Phe	Leu	Phe 595	Arg	Pro	Trp	Asp	Val 600	Thr	Lys	Leu	Lys	Ser 605	Asp	Thr	Ala
	Ala	Ala 610	Ala	Val	Ąrg	Gln	Met 615	Asn	Pro	His	Ile	Arg 620	Val	Thr	Ser	His
	Gln 625	Asn	Arg	Val	Gly	·Pro 630	Asp	Thr	Glu	Arg	Ile 635	Tyr	Asp	Asp	Asp	Phe 640
	Phe	Gln	Asn	Leu	Asp 645	Gly	Val	Ala	Asn	Ala 650	Leu	Asp	Asn	Val	Asp 655	Ala
•	Arg	Met	Tyr	Met 660	Asp	Arg	Arg	Cys	Val 665	Tyr	Tyr	Arg	Lys	Pro 670	Leu	Leu

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Glu Ser	Gly Th 675	r Leu	Gly	Thr	Lys 680	Gly	Asn	Val	Gln	Val 685	Val	Ile	Pro
Phe Leu 690	Thr Gl	u Ser	Tyr	Ser 695	Ser	Ser	Gln	Asp	Pro 700	Pro	Glu	Lys	Ser
Ile Pro 705	Ile Cy	s Thr	Leu 710	Lys	Asn	Phe	Pro	Asn 715	Ala	Ile	Glu	His	Thr 720
Leu Gln	Trp Al	a Arg 725	Asp	Glu	Phe	Glu	Gly 730	Leu	Phe	Lys	Gln	Pro 735	Ala
Glu Asn	Val As 74		Tyr	Leu	Thr	Asp 745	Pro	Lys	Phe	Val	Glu 750	Arg	Thr
Leu Arg	Leu A1 755	a Gly	Thr	Gln	Pro 760	Leu	Glu	Val	Leu	Glu 765	Ala	Val	Gln
Arg Ser 770	Leu Va	l Leu	Gln	Arg 775	Pro	Gln	Thr -	Trp	Ala 780	Asp	Cys	Val	Thr
Trp Ala 785	Cys Hi	s His	Trp 790	His	Thr	Gln	Tyr	Ser 795	Asn	Asn	Ile	Arg	Gln · 800
Leu Leu	His As	n Phé 805	Pro	Pro	Așp	Gln	Leu 810	Thr	Ser	Ser	Gly	Ala 815	Pro
Phe Trp	Ser GI 82		Lys	Arg	Cys	Pro 825	His	Pro	Leu	Thr	Phe 830	Asp	Val
Asn Asn	Pro Le 835	u His	Leu	Asp	Tyr 840	Val	Met	Ala	Ala	Ala 845	Asn	Leu	Phe
Ala Gln 850	Thr Ty	r Gly	Leu	Thr 855	Gly	Ser	Gln	Asp	Arg 860	Ala	Ala	Val	Ala
Thr Phe 865	Leu Gl	n Ser	Val 870	Gln	Val	Pro	Glu	Phe 875	Thr	Pro	Lys	Ser	Gly 880
Val Lys	Ile Hi	s Val 885	Ser	Asp	Gln	Glu	Leu 890	Gln	Ser	Ala	Asn	Ala 895	Ser
Val Asp	Asp Se 90		Leu	Glu	Glu	Leu 905	Lys	Ala	Thr	Leu	Pro 910	Ser	Pro
Asp Lys	Leu Pr 915	o Gly	Phe	ГÀЗ	Met 920	Tyr	Pro	Ile	Asp	Phe 925	Glu	Lys	Asp
Asp Asp 930	Ser As	n Phe	His	Met 935	Asp	Phe	Ile	Val	Ala 940	Ala	Ser	Asn	Leu
Arg Ala 945	Glu <sub>.</sub> As	n Tyr ,	Asp 950		Pro	Ser	Ala	Asp 955	Arg	His	Lys	Ser	Lys 960
Leu Ile	Ala Gl	y Lys 965	Ile			Ala	Ile 970	Ala	Thr	Thr	Thr	Ala 975	Ala
Val Val	Gly Le 98		Cys	Leu	Glu	Leu 985	Tyr	Lys	Val	Val	Gln 990	Gly	His

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Arg Gln Leu Asp Ser Tyr Lys Asn Gly Phe Leu Asn Leu Ala Leu Pro 995 1000 1005 Phe Phe Gly Phe Ser Glu Pro Leu Ala Ala Pro Arg His Gln Tyr Tyr 1010 1015 1020 Asn Gln Glu Trp Thr Leu Trp Asp Arg Phe Glu Val Gln Gly Leu Gln 1025 1030 1035 1040 Pro Asn Gly Glu Glu Met Thr Leu Lys Gln Phe Leu Asp Tyr Phe Lys 1045 1050 1055 Thr Glu His Lys Leu Glu Ile Thr Met Leu Ser Gln Gly Val Ser Met 1065 . 1060 1070 Leu Tyr Ser Phe Phe Met Pro Ala Ala Lys Leu Lys Glu Arg Leu Asp 1075 1080 1085 Gln Pro Met Thr Glu Ile Val Ser Arg Val Ser Lys Arg Lys Leu Gly 1090 1095 1100 Arg His Val Arg Ala Leu Val Leu Glu Leu Cys Cys Asn Asp Glu Ser 1105 1110 1115 1120 Gly Glu Asp Val Glu Val Pro Tyr Val Arg Tyr Thr Ile Arg . 1125 . 1130 . <210> 1571 <211> 125 <212> PRT <213> Homo sapiens . <400> 1571 Met Val Pro Ile Phe Leu Leu Lys Cys Leu Leu Leu His Val Pro Leu '1 5 10 15 Cys Met Ser Ser Asn Leu Ser Phe His Ser Ser His His Leu His Ile 20 25 30 Phe Leu Pro Ser Phe Ser Ser His Leu Pro Arg Pro Leu Tyr Ile Pro 35 40 45 Pro Leu Ser Pro Phe Tyr Ile Phe Ser Ile Ser Pro His Ile Phe Pro 50 55 60 Leu Cys Pro His Leu Cys Ile Pro Pro Asn Phe Pro Ser Ile Tyr Leu 65 70 75 80 Phe Tyr Ser Pro Phe Pro Pro Cys Ile Leu Cys Val Pro Pro Ile Leu · 85 90 95 Leu Tyr Ile Ile Leu Pro Lys Ile Phe Thr Ser Pro Ile Leu Ile Ser <sub>.</sub> 105 100 110 Pro Ser Pro Leu Ser Pro Asn Ile Phe Ile Ser Val Pro

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Phe Phe Asn Pro Ser Thr Pro Val Asn Ala Arg Tyr Glu Phe Gly Pro 65 70 75 80 Ala Leu Phe Val Gly Xaa Asp Ser Ala Gly Leu Ala Val Leu Ser Gly 85 90 95 Ser Phe Leu Cys Cys Thr Cys Pro Glu Pro Glu Arg Pro Asn Ser Ser 105 . 110 100 Pro Gln Ala Leu Ser Ala Trp. Thr. Leu Cys Cys Cys 115 120 <21.0> 1574 <211> 97 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1574 Asn Ser Ala Arg Asp Gln Ala Ser Gly Glu Ser Ile His His Arg Thr 1 10 15 Ser Pro Ser Leu Pro Arg Thr Phe Leu Gly Gln Leu His Ser Gly Leu 20 25 • 30 Leu His His Leu Pro Cys Asp His Ile Ser His His Val Pro Arg Ser . 35 40 45 · .Xaa Glu Arg Ser Ser Ala Ser Pro Ser Ser Leu Thr Leu Arg Gly Lys 50 55 60 . Val Thr Glu Thr Lys Ser Asp Glu Met Thr Ala Met Tyr Thr Ala Val 65 70 75 80 Lys Gly Arg Glu Gly Arg Asn Asp Thr Asn Gly Arg Glu Leu Leu Gly 85 90 95 Asn <210> 1575 <211> 128 <212> PRT <213> Homo sapiens <40.0> 1575 Met Val Val Ala Val Leu Leu Gly Phe Val Ala Met Val Leu Ser Val 5 10 1 15 Val Gly Met Lys Cys Thr Arg Val Gly Asp Ser Asn Pro Ile Ala Lys .25 20 30 970

7

Gly Arg Val Ala Ile Ala Gly Gly Ala Leu Phe Ile Leu Ala Gly Leu 35 40 45 Cys Thr Leu Thr Ala Val Ser Trp Tyr Ala Thr Leu Val Thr Gln Glu 55 50 60 Phe Phe Asn Pro Ser Thr Pro Val Asn Ala Arg Tyr Glu Phe Gly Pro 65 . 70 . 75 80 Ala Leu Phe Val Gly Trp Ala Ser Ala Gly Leu Ala Val Leu Gly Gly 85 · 90 95 Ser Phe Leu Cys Cys Thr Cys Pro Glu Pro Glu Arg Pro Asn Ser Ser 100 105 110 Pro Gln Pro Tyr Arg Pro Gly Pro Ser Ala Ala Ala Arg Glu Tyr Val 120 • 125 115 ۰. <210> 1576 <211> 100 <212> PRT <213> Homo sapiens. <400> 1576 . Met Val Arg Thr Arg Ala Leu Phe Tyr Ile Phe Phe Gln Leu Ser Leu .1 5 10 Thr Ser Gly Leu Ile Glu Asp Ser Cys Ile Leu Ile Ile Ile Tyr Leu 20 25 30 Phe Phe Phe Arg Trp Cys Leu Ala Leu Ser Pro Met Leu Glu Cys Ser 35 45. 40 Gly Val Thr Leu Ala His Cys Asn His His Leu Leu Gly Arg Leu Arg 55 . 60 50 Gln Glu Asn Arg Leu Asn Leu Gly Gly Gly Asp Cys Ser Glu Leu Arg 70 75 80 Leu His His Cys Thr Leu Ala Cys Val Thr Ser Lys Thr Leu Ser His 90 -85 95 · · Thr His Thr Lys 100 <210> 1577 <211> 100 <212> PRT <213> Homo sapiens <400> 1577 Met Val Arg Thr Arg Ala Leu Phe Tyr Ile Phe Ghn Leu Ser Leu

5 10 15 1 Thr Ser Gly Leu Ile Glu Asp Ser Cys Ile Leu Ile Ile Ile Tyr Leu 20 25 30 Phe Phe Phe Arg Trp Cys Leu Ala Leu Ser Pro Met Leu Glu Cys Ser 35. 40 45 Gly Val Thr Leu Ala His Cys Asn His His Leu Leu Gly Arg Leu Arg 50 55 60 Gln Glu Asn Arg Leu Asn Leu Gly Gly Gly Asp Cys Ser Glu Leu Arg 70 75 65 80 Leu His His Cys Thr Leu Ala Cys Val Thr Ser Lys Thr Leu Ser His 85 90 95 Thr His Thr Lys 100 <210> 1578 <211> 118 <212> PRT <213> Homo sapiens <400> 1578 Cys Arg Gly Asp Ile Gln Ile Arg Asp Lys Gly Glu Ala Met Leu Arg 5 1 . 10 15 Lys Thr Leu Asp Arg Ala His Phe Thr Pro Pro Asn Arg Tyr Ile Trp 20 25 30 Ile Tyr Pro Phe Ser Ala Ser Ser Phe Ser Thr Ile Lys Asn Val Thr 35 40 45 . Ile Leu Asn Ala His Lys Ser His Ser Ser Val Thr Phe Cys Glu Cys 50 55 . 60 Ser Thr Ile Phe Ser Phe Ser Met Thr Phe Gln Pro Gln Ala Glu Lys 65 70 75 80 Thr Val Tyr Ser Leu Thr Gln Arg Leu Lys Arg Ile Phe Tyr Tyr Phe . 85 90 95 Lys Tyr Tyr Thr Phe Arg Thr Ile Thr Cys Leu Arg Lys Leu Ser Gln 100 105 110 Asn Val Asp Leu Val Lys 115

<210> 1579 <211> 181 <212> PRT <213> Homo sapiens

<220>

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<221> SITE <222> (132) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (139) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (168) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (170) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (181) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1579 Met Asn Leu Ser Thr Ala Leu Leu Phe Leu Asn Leu Leu Phe Leu Leu 5 10 15 1 Asp Gly Trp Ile Thr Ser Phe Asn Val Asp Gly Leu Cys Ile Ala Val 20 25 · • 30 Ala Val Leu Leu His Phe Phe Leu Leu Ala Thr Phe Thr Trp Met Gly 35 40 45 Leu Glu Ala Ile His Met Tyr Ile Ala Leu Val Lys Val Phe Asn Thr 50 55 60 Tyr Ile Arg Arg Tyr Ile Leu Lys Phe Cys Ile Ile Gly Trp Gly Leu 65 · 75 70 80 Pro Ala Leu Val Val Ser Val Val Leu Ala Ser Arg Asn Asn Asn Glu . 90 85 95 . Val Tyr Gly Lys Glu Ser Tyr Gly Lys Glu Lys Gly Asp Glu Phe Cys 100 105 110 Trp Ile Gln Asp Pro Val Ile Phe Tyr Val Thr Cys Ala Gly Tyr Phe 115 120 125 Gly Val Met Xaa Phe Leu Asn Ile Ala Met Xaa Ile Val Val Met Val 130 135 140 Gln Ile Cys Gly Arg Asn Gly Lys Arg Ser Asn Arg Thr Leu Arg Glu 145 150 155 . 160 Glu Val Val Arg Asn Leu Arg Xaa Val Xaa Ser Leu Thr Phe Leu Val 165 170 175 Gly Met Thr Trp Xaa

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<210> 1580 <211> 320 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (168) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1580 Met Asn Leu Ser Thr Ala Leu Leu Phe Leu Asn Leu Leu Phe Leu Leu 1 5 10 Asp Gly Trp Ile Thr Ser Phe Asn Val Asp Gly Leu Cys Ile Ala Val 20 25 30 Ala Val Leu Leu His Phe Phe Leu Leu Ala Thr Phe Thr Trp Met Gly 35 40 45 Leu Glu Ala Ile His Met Tyr Ile Ala Leu Val Lys Val Phe Asn Thr , 50 , 55 60 Tyr Ile Arg Arg Tyr Ile Leu Lys Phe Cys Ile Ile Gly Trp Gly Leu 65 70 75 . 80 Pro Ala Leu Val Val Ser Val Val Leu Ala Ser Arg Asn Asn Asn Glu 85 90 95 Val Tyr Gly Lys Glu Ser Tyr Gly Lys Glu Lys Gly Asp Glu Phe Cys 100 · 105 110 Trp Ile Gln Asp Pro Val Ile Phe Tyr Val Thr Cys Ala Gly Tyr Phe 115 120 ` 125 Gly Val Met Phe Phe Leu Asn Ile Ala Met Phe Ile Val Val Met Val 130 135 140 Gln Ile Cys Gly Arg Asn Gly Lys Arg Ser Asn Arg Thr Leu Arg Glu 145 150 155 160 Glu Val Leu Arg Asn Leu Arg Xaa Val Val Ser Leu Thr Phe Leu Leu 🕚 165 170 175 Gly Met Thr Trp Gly Phe Ala Phe Phe Ala Trp Gly Pro Leu Asn Ile • 180 185 -190 Pro Phe Met Tyr Leu Phe Ser Ile Phe Asn Ser Leu Gln Gly Leu Phe 195 . 200 205 Ile Phe Ile Phe His Cys Ala Met Lys Glu Asn Val Gln Lys Gln Trp 210 215 220 Arg Arg His Leu Cys Cys Gly Arg Phe Arg Leu Ala Asp Asn Ser Asp 225 230 · 235 240 Trp Ser Lys Thr Ala Thr Asn Ile Ile Lys Lys Ser Ser Asp Asn Leu

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Clv	Tare	Sor	Lou	Sor	Sor	60 <b>7</b>	Cor	Tlo	<b>C</b> 1	Com	<b>N</b>	<b>G</b>	<b>m</b> h	<b>m</b>	
GTÀ	Lys	Der	260		Set	Ser	Ser	265	Gτλ	ser	Asn	ser	270	Tyr	J
Thr	Ser	Lys 275	Ser	Lys	Ser	Ser	Ser 280	Thr	Thr	Tyr	Phe	Lys 285	Arg	Asn	ł
His	Thr 290	Asp	Asn	Val	Ser	Tyr 295	Glu	His	Ser	Phe	Asn 300	Lys	Ser	Gly	ł
Leu 305	Arg	Gln	Cys	Phe	His 310	Gly	Gln	Val	Leu	Val 315	Lys	Thr	Gly	Pro	
<21 <21	0> 19 1> 13 2> P1 3> Ho	31 RT	sapie	ens						-		L			
	0> 19		_		_	-1		•	_	- 1	_		•	<b>T</b>	
Asn 1	Ile	Phe	Leu	Glu 5	Trp	116	Leu	Arg	Arg 10	TTe	Leu	ser	Leu	15 15	
1	Ile Thr			5					10					15	
1 Gly	•	Phe	Leu 20	5 Met	His	Gly	Arg	Ala 25	10 Gly	Val	Asn	Arg	Ile 30	15 Ser	
1 Gly Trp	Thr	Phe Ala 35	Leu 20 Asp	5 Met Pro	His Glu	Gly Ile	Arg Ser 40	Ala 25 Leu	10 Gly Leu	Val Thr	Asn Glu	Arg Ala 45	Ile 30 Ser	15 Ser Ser	
l Gly Trp Glu	Thr Pro Asp	Phe Ala 35 Ala	Leu 20 Asp Lys	5 Met Pro Leu	His Glu Asp	Gly Ile Ala 55	Arg Ser 40 Lys	Ala 25 Leu Ala	10 Gly Leu Val	Val Thr Glu	Asn Glu Arg 60	Arg Ala 45 Leu	Ile 30 Ser Lys	15 Ser Ser Ser	
1 Gly Trp Glu Ser 65	Thr Pro Asp 50	Phe Ala 35 Ala Ala	Leu 20 Asp Lys His	5 Met Pro Leu Val	His Glu Asp Cys 70	Gly Ile Ala 55 Val	Arg Ser 40 Lys Leu	Ala 25 Leu Ala Leu	10 Gly Leu Val Gln	Val Thr Glu Pro 75	Asn Glu Arg 60 Leu	Arg Ala 45 Leu Val	Ile 30 Ser Lys Cys	15 Ser Ser Ser Tyr	:
1 Gly Trp Glu Ser 65 Val	Thr Pro Asp 50 Arg	Phe Ala 35 Ala Ala Phe	Leu 20 Asp Lys His Val	5 Met Pro Leu Val Glu 85	His Glu Asp Cys 70 Glu	Gly Ile Ala 55 Val Thr	Arg Ser 40 Lys Leu Ser	Ala 25 Leu Ala Leu Tyr	10 Gly Leu Val Gln Lys 90	Val Thr Glu Pro 75 Cys	Asn Glu Arg 60 Leu Asp	Arg Ala 45 Leu Val Phe Tyr	Ile 30 Ser Lys Cys Ile	15 Ser Ser Tyr Gln 95	
1 Gly Trp Glu Ser 65 Val Ile	Thr Pro Asp 50 Arg Gln	Phe Ala 35 Ala Ala Phe Lys	Leu 20 Asp Lys His Val Thr 100	5 Met Pro Leu Val Glu 85 Leu	His Glu Asp Cys 70 Glu Pro	Gly Ile Ala 55 Val Thr Asp	Arg Ser 40 Lys Leu Ser Ala	Ala 25 Leu Ala Leu Tyr Asn 105	10 Gly Leu Val Gln Lys 90 Thr	Val Thr Glu Pro 75 Cys Asp	Asn Glu Arg 60 Leu Asp Phe	Arg Ala 45 Leu Val Phe Tyr	Ile 30 Ser Lys Cys Ile Tyr 110	15 Ser Ser Tyr Gln 95 Glu	

<211> 87 <212> PRT <213> Homo sapiens

<400> 1582

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Met Thr Gly Gln Ile Pro Arg Leu Ser Lys Val Asn Leu Phe Thr Leu 1 5 10 15 Leu Ser Leu Trp Met Glu Leu Phe Pro Ala Glu Ala Gln Arg Gln Lys 20 25 30 Ser Gln Lys Asn Glu Glu Gly Lys His Gly Pro Leu Gly Asp Asn Glu 35 40 45 Glu Arg Thr Arg Val Ser Thr Asp Lys Arg Gln Lys Thr Met Phe Cys 50 55 60 Leu Phe Glu Asn Asp Cys Lys Cys Lys Ala Leu Arg Val Met Ile Arg 65 70 . 75 · 80 Ser Met Ser Arg Ser Val Pro · 85 <210> 1583 <211> 87 <212> PRT

<400> 1583 Met Thr Gly Gln Ile Pro Arg Leu Ser Lys Val Asn Leu Phe Thr Leu . 1 5 10 15 Leu Ser Leu Trp Met Glu Leu Phe Pro Ala Glu Ala Gln Arg Gln Lys 25 20 30 . Ser Gln Lys Asn Glu Glu Gly Lys His Gly Pro Leu Gly Asp Asn Glu 35. 40 45 Glu Arg Thr Arg Val Ser Thr Asp Lys Arg Gln Lys Thr Met Phe Cys 50 55 60 Leu Phe Glu Asn Asp Cys Lys Cys Lys Ala Leu Arg Val Met Ile Arg 65 70 75 80 .

Ser Met Ser Arg Ser Val Pro 85

<210> 1584 <211> 113 <212> PRT <213> Homo sapiens

<213> Homo sapiens

<400> 1584
Met Ser Pro Ser Pro Arg Trp Gly Phe Leu Cys Val Leu Phe Thr Ala
1 5 10 15
Val His Pro Ala Pro Ser Thr Ala Pro Val Gln Asp Lys Cys Pro Val
20 25 30
Asn Thr Trp Glu Ala Met Gln Ala Ser Ser Gln Gln Leu Leu Gln Thr
35 40 45

Asp Pro Arg Pro Lys Pro Phe Leu Leu Pro Pro Leu Pro Pro Leu Leu 50 55 60 Leu Ile Ser Ala Gly Thr Glu Val Ser Ser Leu Val Phe Gln Lys Ser 65 70 · 75 80 Pro Leu His Thr Gin Pro Glu Gly Ala Ile Lys Thr Ala Gly Gln Pro 85 90 95 Thr Ser Val His Ser Lys Val Leu Ser Lys Gly Ser Leu Leu Gly . 100 105 110

Glu

<210> 1585 <211> 94 <212> PRT <213> Homo sapiens <400> 1585 Met Pro His Ser Ser Leu Tyr Pro Pro Pro Phe Phe Lys Met Lys Leu 1 · 5 10 · 15 Ile Ile Arg Val Trp Phe Ile Ile Ser Leu Phe Phe Val Gln Gly Arg 20 . 25 . 30 Thr Asn Pro Cys Ile Leu Leu Pro Tyr Thr His Pro Gln Val Ala Leu 35 40 45 His Leu Leu Phe Cys Ala Leu Leu Phe Ser Asp Ala Leu Gly Lys Ala 50 55 60 . Thr Ser Val Met Thr Tyr Thr Gly Phe Phe Thr His Ser Thr His Cys 65 ·70 75 80 Arg Phe His Ile Ser Cys Phe Ser Leu Ser Phe Leu Ile Leu 85 90 <210> 1586 <211> 133 <212> PRT <213> Homo sapiens <400> 1586 His Gln Ala Ile Lys Pro Gly Tyr Ser Ala Glu Asn Val Ala His Thr 1 5 10 15 Asp His Thr Leu Gly Cys Val Thr Ile Val Trp Cys Thr Cys Trp Lys 20 25 30 Asn Ser Ser Met Leu Leu Gly Asp Ile Ile Ser Val Gly Asn Met Pro 35 40 45

Leu Thr Asp Phe Phe Phe Phe Leu Phe Ala Val Gly Leu Gly Gln Leu

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50 55 60 Ile Gln Gln Ser Ile Phe Phe Phe Leu Ser Pro Asn Leu Asn Arg 65 70 75 80 Ser Lys Met Cys Ser Gly Ile Pro Gly Asn Arg Cys Val Cys Lys Val 85 · 90 95 Lys Asn Arg Leu Phe Arg Asn Ser Leu Phe Arg Tyr Leu His Pro Ala 100 105 110 Ser His Val Lys Tyr Leu Ser Leu Lys Gly Leu Arg Cys Thr Ser Phe 115 120 125 Ile Ser Tyr Phe Ser 130 <210> 1587 <211> 94 <212> PRT <213> Homo sapiens <400> 1587 Met Pro His Ser Ser Leu Tyr Pro Pro Pro Phe Phe Lys Met Lys Leu 1 5 10 15 Ile Ile Arg Val Trp Phe Ile Ile Ser Leu Phe Phe Val Gln Gly Arg 20 25 30 Thr Asn Pro Cys Ile Leu Leu Pro Tyr Thr His Pro Gln Val Ala Leu 35 40 45 His Leu Leu Phe Cys Ala Leu Leu Phe Ser Asp Ala Leu Gly Lys Ala 50 55 60 Thr Ser Val Met Thr Tyr Thr Gly Phe Phe Thr His Ser Thr His Cys 65 70 75 80 . Arg Phe His Ile Ser Cys Phe Ser Leu Ser Phe Leu Ile Leu 85 90 <210> 1588 <211> 215 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1588 Met Glu Leu Ser Cys Pro Gly Ser Arg Cys Pro Val Gln Glu Gln Arg 1 5 10 15 Ala Arg Trp Glu Arg Lys Arg Ala Cys Thr Ala Arg Glu Leu Leu Glu

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20		25	· 30	
Thr Glu Arg Arg 35	Tyr Gln Glu	Gln Leu Gly 40	Leu Val Ala Thr 45	Tyr Phe
Leu Gly Ile Leu 50	Lys Ala Lys 55	Gly Thr Leu	Arg Pro Pro Glu 60	Arg Gln
Ala Leu Phe Gly 65	Ser Trp Glu 70	Leu Ile Tyr	Gly Ala Ser Gln 75	Glu Leu 80
Leu Pro Tyr Leu	Glu Gly Gly 85	Cys Trp Gly 90	Gln Gly Leu Glu	Gly Phe 95
Cys Arg His Leu 100	Glu Leu Tyr	Asn Gln Phe 105.	Ala Ala Asn Ser 110	Glu Arg
Ser Gln Thr Xaa 115		Gln Leu Lys 120	Lys Asn Lys Gly 125	Phe Arg
Lys Phe Val Arg 130	Leu Gln Glu 135	Gly Arg Pro	Glu Phe Gly Gly 140	Leu Gln
Leu Gln Asp Leu 145	Leu Pro Leu 150	Pro Leu Gln	Arg Leu Gln Gln 155	Tyr Glu 160
	Ala Leu Ala 165	Glu Asn Thr 170	Gly Pro Asn .Ser	Pro Asp 175
His Gln Gln Leu 180	Thr Arg Arg	Phe Leu Leu 185	Leu Gly Asn Ala 190	Gly Trp
Arg Leu Pro Leu 195	Leu Tyr Ser	Phe Leu Ile 200	Leu Thr Ser Asn 205	Asn Val
Trp Tyr Asp Pro 210	Ile Phe His 215			
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<210> 1589 <211> 69 <212> PRT <213> Homo sapie	ens			
<400> 1589	•			
Glu Ile Leu Leu 1	Lys Lys Lys 5	Asn Gln Glu 10	Thr Lys Ser Asn	Pro Thr 15
Lys Pro Gln Met 20	Asn Gln Pro	Leu Thr Gln 25	Met Arg Gly Phe 30	Gly Thr
Asp Lys Leu Cys 35	Ala Val.Ser	Met Ala Arg 40	His Leu Ser Arg 45	Leu Gln
Leu Cys Lys Cys 50	Gly Tyr Phe 55	Tyr Val Val	Tyr Ser Phe Tyr 60	His Leu
Phe Phe His Trp 65	Ile	:		

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<210> 1590 <211> 211 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (21) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (104) . <223> Xaa equals any of the naturally occurring L-amino acids <400> 1590 Met Ser Gly Met Thr Leu Ser Ser Thr Asp Met Tyr Thr Val Ser Leu 1 5 10 15 Leu Leu Cys Leu Xaa Phe Lys Lys Ser Asp Pro Asp Pro Gly Pro Phe 20 25 30 Gln Asn Asn Leu Phe His Asn His Gly Thr Gln Ser Gln Ser Cys Met 35 40 45 Gly Ser Lys Val Gly Asp Val Ile Pro Gly Ala Ala Arg Leu Ile Ser 50 55 60 . Glu Thr Ala Gln Arg Val His Thr Ile Gly Gln Lys Gln Lys Asn Asp 65 70 75 . 80 Gln His Leu Arg Arg Val Gln Ala Leu Leu Ser Gly Arg. Gln Ala Lys 85 · 90 95 Gly Leu Thr Ser Gly Arg Trp Xaa Leu Arg Gln Gly Trp Leu Leu Val 100 105 110 Val Pro Pro His Gly Glu Pro Arg Pro Arg Met Phe Leu Phe Thr . 115 120 · 125 Asp Val Leu Leu Met Ala Lys Pro Arg Pro Pro Leu His Leu Leu Arg 130 · 135 ' 140 Ser Gly Thr Phe Ala Cys Lys Ala Leu Tyr Pro Met Ala Gln Cys His 145 150 155 160 Leu Ser Arg Val Phe Gly His Ser Gly Gly Pro Cys Gly Gly Leu Leu 165 170 175 Ser Leu Ser Phe Pro Arg Glu Lys Leu Leu Met Ser Thr Asp Gln 190 Glu Glu Leu Ser Arg Trp Tyr His Ser Leu Thr Trp Ala Ile Ser Ser 195 200 205 Gln Lys Asn 210 .

<210> 1591 <211> 349 <212> PRT <213> Homo sapiens . <220> <221> SITE <222> (183) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (191) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (192) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (334) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (344) . <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (345) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (348) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1591 Met Phe Leu Asp Arg Pro Gln Gln Trp Leu Gln Leu Val Leu Leu Pro 1 10 15 . Pro Ala Leu Phe Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala 20 25 30 Ser Ala Arg Ala Val Pro Arg Asn Val Gln Pro Tyr Val Val Tyr Glu 35 40 . 45 Glu Val Thr Asn Val Trp Ile Asn Val His Asp Ile Phe Tyr Pro Phe 50 55 60 Pro Gln Ser Glu Gly Glu Asp Glu Leu Cys Phe Leu Arg Ala Asn Glu 65. 70 75 80 . . Cys Lys Thr Gly Phe Cys His Leu Tyr Lys Val Thr Ala Val Leu Lys .

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Ser	Gln	Gly	Tyr 100	Asp	Trp	Ser	Glu	Pro 105	Phe	Ser	Pro	Gly	Glu 110	Asp	Glu
Phe	Lys	Cys 115	Pro	Ile	Lys	Glu	Glu 120	Ile	Ala	Leu	Thr	Ser 125	Gly	Glu	Trp
Glu	Val 130	Leu	Ala	Arg	His	Gly 135	Ser	Lys	Ile		Val 140		Glu	Glu	Thr
Lys 145	Leu	Val	Tyr	Phe	Gln 150	Gly	Thr	Lys	Asp	Thr 155	Pro	Leu	Glu	His	His 160
Leu	Tyr	Val	Val	Ser 165	Tyr	Glu	Ala	Ala	Gly 170	Glu	Ile	Val	Arg	Leu 175	Thr
Thr	Pro	Gly	Phe 180	Ser	His	Xaa	Cys	Ser 185	Met	Ser	Gln	Asn	Phe 190	Xaa	Xaa
Phe	Val	Ser 195	His	Ile	Thr	Ala	Gln 200	Val	Ala	Ala	Ala	Ser 205	Ala	Gly	Asn
Gln <sup>.</sup>	Ala 210	Gly	Gly	Thr	Glu	Trp 215	Pro	Ala	Gly	Pro	Ser 220	Glu	Ala	Leu	Cys
Pro 225	Ala	Gln	Arg	Trp	Pro 230	Ala	Pro	Arg	Ser '	Arg 235	Cys	Leu	His	Arg	Pro 240
Asp	Ala	Phe	Tyr	Pro 245	Phe	Leu	Asn	Ala	Leu 250	Gly	Phe	Tyr	Val	Arg 255	Cys
Phe	Leu	Val	Ala 260	Glu	Thr	Glu	Arg	Trp 265	Trp	Ser	Arg	Ala	Ser 270	Pro	Ser
Ser	Pro	Arg 275	Leu	Leu	Gly	Gly	Gly 280	Gly	His	Thr	Leu	Met 285	Gly	Thr	Gly
Glu	Ala 290	Arg	Arg	Asp	Ser	Glu 295	Glu	Arg	Ala	Ala	Phe 300	Arg	Leu	Gly	Leu
Pro 305	Val	Thr	Ser	Gln	Ser 310	Pro	Gly	Pro		Ser 315	His	Arg	Pro	Gln	His 320
Pro	Ser	Met	Gln	Leu 325	Pro	Val	Pro	Pro	Gly 330	Gln	Pro	Pro	Xaa	Leu 335	Asp
Val	Cys	Val	Leu 340	Phe	Gly	Gly	Xaa	Xaa 345	Phe	Ile	Xaa	Ile			

<210> 1592 <211> 144 <212> PRT <213> Homo sapiens

<400> 1592 Ala Pro Phe Leu Pro Lys Pro Glu Gln Arg Val Met Arg Ala Pro Gln 1 5 10 15

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Glu Lys	Arg Pro 20	Gly Pro	Ala G	ly Gly 25	Thr Thr	Cys Gly	Gln 30	Pro	Ser
Cys Pro	Gln Ala 35	Phe Arg		la Leu 40	Lys Arg	Thr Glu 45	Leu	Pro	Arg .
Ser Ala 50	Gly Gln	Trp Arg	Leu S 55	Ser Pro	Pro Gln	Pro Ser .60	Arg	Pro	Ala
Thr Cys 65	Val Cys	Leu Thr 70	Arg T	hr His	Gln Gly 75	+	Gly	Trp	Glu 80
Leu' Asn	His Pro	His Leu 85	Arg V	al Ile.	Phe Pro 90	Ser Pro	Leu	Pro 95	Ser
Pro Pro .	Arg Ala 100	Leu Pro	Gly A	la Gly 105	Lys Lys	Lys Ser	Lys 110	Lys	Lys
Arg Lys	Lys Lys 115 .	Lys Arg		ys Pro 20	Pro Leu	His Ile 125	Met	Glu	Arg
Lys Tyr 130	Phe Cys	Arg Phe	Leu P 135	he Phe	Tyr Asn	Tyr Ala 140	Trp	Lys	Lys .

<210> 1593 <2.11> 497 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (183) <223> Xaa.equals any of the naturally occurring L-amino acids < <400> 1593 . Met Phe Leu Asp Arg Pro Gln Gln Trp Leu Gln Leu Val Leu Leu Pro 1 5 . 10 15 Pro Ala Leu Phe Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala 20 25 30 Ser Ala Arg Ala Val Pro Arg Asn Val Gln Pro Tyr Val Val Tyr Glu 35 40 45 Glu Val Thr Asn Val Trp Ile Asn Val His Asp Ile Phe Tyr Pro Phe 55 50 60 Pro Gln Ser Glu Gly Glu Asp Glu Leu Cys Phe Leu Arg Ala Asn Glu 65 70 75 80 Cys Lys Thr Gly Phe Cys His Leu Tyr Lys Val Thr Ala Val Leu Lys 85 90 95 . Ser Gln Gly Tyr Asp Trp Ser Glu Pro Phe Ser Pro Gly Glu Asp Glu

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			100					105			•		110			
Phe	: Lys	Cys 115	Pro	Ile	Lys	Glu	Glu 120	Ile	Ala	Leu	Thr	Ser 125	Gly	Glu	Trp	
Glu	Val 130	Leu	Ala	Arg	His	Gly 135	Ser	Lys	Ile	Trp	Val 140	Asn	Glu	Glu	Thr	
Lys 145	Leu	Val	Tyr	Phe	Gln 150	Gly	Thr	Lys	Asp	Thr 155	Pro	Leu	Glu	His	His 160	
Leu	Tyr	Val	Val	Ser 165	Ťyr	Glu	Ala	Ala	Gly 170	Glu	Ile	Val	Arg	Leu 175	Thr	
Thr	Pro	Gly	Phe 180	Ser	His	Xaa	Cys	Ser 185	Met	Ser	Gln	Asn	Phe 190	Asp	Met	
Phe	Val	Ser 195	His	Tyr	Ser	Ser	Val 200	Ser	Thr	Pro	Pro	Cys 205	Val	His	Val	
Tyr	Lys 210	Leu	Ser	Gly	Pro	Asp 215	Asp	Asp	Pro	Leu	His 220	Lys	Ġln	Pro	Arg	
Phe 225	Trp	Ala	Ser	Met	Met 230	Glu	Ala	Ala	Ser	Cys 235	Pro	Pro	Asp	Tyr	Val 240	
Pro	Pro	Glu	Ile	Phe 245	His	Phe	His	Thr	Arg 250	Ser	Asp	Val	Arg	Leu 255	Tyr	
Gly	Met	Ile	Tyr 260	Ĺys	Pro	His '.	Ala	Leu 265	Gln	Pro	Gly	Lys	Lys 270	His	Pro	
Thr	Val	Leu 275	Phe	Val	Tyr	Gly	Gly 280	Pro	Gln	Val	Gln	Leu 285	Val	Asn	Asn	
Ser	Phe 290	Lys	Gly	Ile	Lys	Tyr 295	Leu	Arg	Leu	Asn	Thr 300	Leu	Ala	Ser	Leu	
Gly 305		Ala	Val	Val	Val 310	Ile	Asp	Gly	Arg	Gly 315	Ser	Cys	Gln	Ärg	Gly . 320	
Leu	Arg	Phe	Glu	Gly 325	Ala	Leu	Lys	Asn	Gln 330	Met	Gly <sup>.</sup>	Gln	Val	Glu 335	Ile	
Glu	. Asp	Gln	Val 340	Glu	Gly	Leu	Gln	Phe 345	Val	Ala	Glu	Lys	Tyr 350	Ģly	Phe	
Ile	Asp	Leu 355	Ser	Arg	Val	Ala	Ile 360	His	Gly	Trp	Ser	Tyr 365	Gly	Gly	Phe	
Leu	. Ser 370	Leu	Met	Gly	Leu	Ile 375	His	Lys	Pro	Gln	Val 380	Phe	Lys	Val	Ala	
Ile 385	Ala	Gly	Ala	Pro	Val 390	Thr	Val	Trp	Met	Ala 395	Tyr	Asp	Thr	Gly	Tyr 400	
Thr	Glu	Arg	Tyr	Met 405	Asp	Val	Pro	Glu	Asn 410	Asn	Gln	His	Gly	Tyr 415	Glu	
Ala	Glv	Ser	Val	Ala	Len	His	Val	Glu	Live	Len	Pro	Acr	<b>C</b> ] 12	Dro	Agn	

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Ala Gly Ser Val Ala Leu His Val Glu Lys Leu Pro Asn Glu Pro Asn ula Leu His var Gra ---984

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. Arg Leu Leu Ile Leu His Gly Phe Leu Asp Glu Asn Val His Phe Phe His Thr Asn Phe Leu Val Ser Gln Leu Ile Arg Ala Gly Lys Pro Tyr Gln Leu Gln Ile Tyr Pro Asn Glu Arg His Ser Ile Arg Cys Pro Glu Ser Gly Glu His Tyr Glu Val Thr Leu Leu His Phe Leu Gln Glu Tyr Leu <210> 1594 ' <211> 497 <212> PRT <213> Homo sapiens <400> 1594 Met Phe Leu Asp Arg Pro Gln Gln Trp Leu Gln Leu Val Leu Leu Pro Pro Ala Leu Phe Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala .20 Ser Ala Arg Ala Val Pro Arg Asn Val Gln Pro Tyr Val Val Tyr Glu 35 . Glu Val Thr Asn Val Trp Ile Asn Val His Asp Ile Phe Tyr Pro Phe Pro Gln Ser Glu Gly Glu Asp Glu Leu Cys Phe Leu Arg Ala Asn Glu • Cys Lys Thr Gly Phe Cys His Leu Tyr Lys Val Thr Ala Val Leu Lys Ser Gln Gly Tyr Asp Trp Ser Glu Pro Phe Ser Pro Gly Glu Asp Glu 100. Phe Lys Cys Pro Ile Lys Glu Glu Ile Ala Leu Thr Ser Gly Glu Trp Glu Val Leu Ala Arg His Gly Ser Lys Ile Trp Val Asn Glu Glu Thr Lys Leu Val Tyr Phe Gln Gly Thr Lys Asp Thr Pro Leu Glu His His Leu Tyr Val Val Ser Tyr Glu Ala Ala Gly Glu Ile Val Arg Leu Thr Thr Pro Gly Phe Ser His Ser Cys Ser Met Ser Gln Asn Phe Asp Met 

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Phe Val Ser His Tyr Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser Gly Pro Asp Asp Asp Pro Leu His Lys Gln Pro Arg 210. Phe Trp Ala Ser Met Met Glu Ala Ala Ser Cys Pro Pro Asp Tyr Val Pro Pro Glu Ile Phe His Phe His Thr Arg Ser Asp Val Arg Leu Tyr Gly Met Ile Tyr Lys Pro His Ala Leu Gln Pro Gly Lys Lys His Pro - 265 Thr Val Leu Phe Val Tyr Gly Gly Pro Gln Val Gln Leu Val Asn Asn Ser Phe Lys Gly Ile Lys Tyr Leu Arg Leu Asn Thr Leu Ala Ser Leu . Gly Tyr Ala Val Val Val Ile Asp Gly Arg Gly Ser Cys Gln Arg Gly. Leu Arg Phe Glu Gly Ala Leu Lys Asn Gln Met Gly Gln Val Glu Ile Glu Asp Gln Val Glu Gly Leu Gln Phe Val Ala Glu Lys Tyr Gly Phe Ile Asp Leu Ser Arg Val Ala Ile His Gly Trp Ser Tyr Gly Gly Phe 355 . 360 Leu Ser Leu Met Gly Leu Ile His Lys Pro Gln Val Phe Lys Val Ala . Ile Ala Gly Ala Pro Val Thr Val Trp Met Ala Tyr Asp Thr Gly Tyr Thr Glu Arg Tyr Met Asp Val Pro Glu Asn Asn Gln His Gly Tyr Glu Ala Gly Ser Val Ala Leu His Val Glu Lys Leu Pro Asn Glu Pro Asn Arg Leu Leu Ile Leu His Gly Phe Leu Asp Glu Asn Val His Phe Phe . His Thr Asn Phe Leu Val Ser Gln Leu Ile Arg Ala Gly Lys Pro Tyr Gln Leu Gln Ile Tyr Pro Asn Glu Arg His Ser Ile Arg Cys Pro Glu · 470 Ser Gly Glu His Tyr Glu Val Thr Leu Leu His Phe Leu Gln Glu Tyr 485 · 

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Phe Ala Thr Arg Cys Asn Arg Glu Lys Lys Asp Thr Arg Ser Tyr Asn

		35					40					45			
Cys	Arg 50	Val	Ala	Glu	Ser	Thr 55	Tyr	Gln	His	His	Pro 60	Lys	Arg	Pro	Ser
Arg 65	Gln	Ile	His	Lys	Gly 70	Asp	Ile	Thr	Leu	Val 75	Pro	Thr	Ile	Asn	Gly 80
Thr	Leu	Pro	Ile	Arg .85	Ser	His	His	Arg	Ser 90	Ser	Pro	Ser	Ser	Ser 95	Pro
Thr	Leu	Glu	Arg 100	Gly	Gln	Met	Gly	Ser 105	Arg	Gln	Ser	His	Asn 110	Ser	His
Gln	Ser	Leu 115	Asn	Ser	Leu	Val	Thr 120	Ile	Ser	Ser	Asn	His 125	Val	Pro	Glu
Asn	Phe 130	Ser	Leu	Glu	Leu	Thr 135	His	Ala	Thr	Pro	Ala 140	Val	Glu	Val	Ser
Gln 145	Leu	Leu	Ser	Met	Leu 150	His <sub>.</sub>	Gln	Gly	Gln	Tyr 155	Ġln	Pro	Arg	Pro	Ser 160
Phe	Arg	GlY.	Asn	Lys 165	Tyr	Ser	Arg	Ser	Tyr 170	Arg	Tyr	Ala	Leu	Gln 175	Asp
Met	Asp	Lys	Phe 180	Ser	Leu	Lys	Asp	Ser 185	Gly	Arg	Gly	Asp	Ser 190	Glu	Ala
Gly	Asp	Ser 195		Tyr	Asp	Leu	Gly 200	Arg	Asp	Ser	Pro	Ile 205	Asp	Arg	Leu
Leu	Gly 210	Glu	Gly	Phe	Ser	Asp 215	Leu	Phe	Leu	Thr	Asp 220	Gly	Arg	Ile	Pro
Ala 225	Ser	Tyr	Glu	Thr	Leu 230	His	Gly	Gly	Val	Gln' 235	Gly	Prọ	Gly	Thr	Leu 240

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Arg Gln Ile His Lys Gly Asp Ile Thr Leu Val Pro Thr Ile Asn Gly • 75 Thr Leu Pro Ile Arg Ser His His Arg Ser Ser Pro Ser Ser Ser Pro Thr Leu Glu Arg Gly Gln Met Gly Ser Arg Gln Ser His Asn Ser His Gln Ser Leu Asn Ser Leu Val Thr Ile Ser Ser Asn His Val Pro Glu Asn Phe Ser Leu Glu Leu Thr His Ala Thr Pro Ala Val Glu Val Ser 130 135 . Gln Leu Leu Ser Met Leu His Gln Gly Gln Tyr Gln Pro Arg Pro Ser Phe Arg Gly Asn Lys Tyr Ser Arg Ser Tyr Arg Tyr Ala Leu Gln Asp Met Asp Lys Phe Ser Leu Lys Asp Ser Gly Arg Gly Asp Ser Glu Ala Gly Asp Ser Asp Tyr Asp Leu Gly Arg Asp Ser Pro Ile Asp Arg Leu Leu Gly Glu Gly Phe Ser Asp Leu Phe Leu Thr Asp Gly Arg Ile Pro Ala Ala Met Arg Leu Cys Thr Glu Glu Cys Arg Val Leu Gly His Ser 225 230 235 Asp Gln Cys Trp Met Pro Pro Leu Pro Ser Pro Ser Ser Asp Tyr Arg Ser Asn Met Phe Ile Pro Gly Glu Glu Phe Pro Thr Gln Pro Gln Gln Gln His Pro His Gln Ser Leu Glu Asp Asp Ala Gln Pro Ala Asp Ser . 275 -,280 . Gly Glu Lys Lys Lys Ser Phe Ser Thr Phe Gly Lys Asp Ser Pro Asn 290 -Asp Glu Asp Thr Gly Asp Thr Ser Thr Ser Ser Leu Leu Ser Glu Met Ser Ser Val Phe Gln Arg Leu Leu Pro Pro Ser Leu Asp Thr Tyr Ser Glu Cys Ser Glu Val Asp Arg Ser Asn Ser Leu Glu Arg Arg Lys Gly Pro Leu Pro Ala Lys Thr Val Gly Tyr Pro Gln Gly Val Ala Ala Trp 355 . . Ala Ala Ser Thr His Phe Gln Asn Pro Thr Thr Asn Cys Gly Pro Pro 

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Leu Gly Thr His Ser Ser Val Gln Pro Ser Ser Lys Trp Leu Pro Ala 385 390 395 .400 Met Glu Glu Ile Pro Glu Asn Tyr Glu Glu Asp Asp Phe Asp Asn Val · 410 405 415 Leu Asn His Leu Asn Asp Gly Lys His Glu Leu Met Asp Ala Ser Glu 420 425 430 Leu Val Ala Glu Ile Asn Lys Leu Leu Gln Asp Val Arg Gln Ser 435 440 445 <210> 1598 <211> 95 <212> PRT . <213> Homo sapiens <220> <221> SITE <222> (46) <223> Xaa equals any of the naturally occurring L-amino acids • • . . <400> 1598 Met Thr Ser Tyr Ile Leu Ile Ser Phe Val Leu Leu Ile Gly Val Gly 1 5, 10 15 Cys Ile Glu Lys Asp Gln Ser Cys Pro Val Phe Gly Gly Arg Lys Arg 20 25 30 . Leu His Leu Leu Phe Val Gly Gly Gln Leu Arg Gln Val Xaa Leu Gly. 35 40 45 Ala Pro Arg Pro Pro Gly Gly Gln Asp Pro Ser His Gln Arg Leu Gly 50 55 60 Arg Gly Glu Leu Pro Leu Val Arg Gln His His Arg Asp Leu His His 65 70 75 · 80 · Arg Gly Pro His Gln Glu Gly Leu Gln Val His His Gln His Glu .. 85 90 95 <210> '1599 <211> 152 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1599 Xaa Pro Ser Trp Trp Gly Pro Arg Trp Cys Arg Ser Ser Cys Gly Val 1 5 10 15 .

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Ala Arg Thr Arg Val Val His Pro Val Arg Val Ala Asp Gly Leu Asp 20 25 30 Leu Ala Leu Leu Glu Val Gly Glu Leu Pro Ala Gly His Ala Leu Leu 35 40 45 Ala Val Leu Val Val Glu Leu His Val Ala Ala Arg Leu Asp Pro Ala 50 55 60 Asn Tyr Pro Ser Leu Leu Leu Gly Asp Gly Arg His Asp His Leu Gly 65 70 75 80 Arg Gly Pro Glu Val Gly Cys Pro Val Ala Glu His His Ala Gly Gly 85 90 95 . Leu Ile Asp Ala Ser Gly Asp Gly Val Asp Gly Gly Phe His Ile Asn 100 105 110 His Arg Asp Pro Phe Pro Glu Asp Ser Gly Phe Ala Ser Asp Ala Leu 115 120 125 Asn Thr Ala His Gly Ile Gln Glu Arg Ser Asp Leu Gln Gly Arg Pro 130 135 140 Ala Val Thr Glu Lys Thr Arg His 145 150 ... <210> 1600 <211> 82 <212> PRT <213> Homo sapiens <400> 1600 Met Arg Thr Trp Ala Ser Leu Ala Leu Gly Leu Thr Arg Ala Leu Gly 1 5 10 . 15 Gly Met Gly Ser Phe Leu Leu Arg Ile Leu Gly Trp Ser Trp Ala Met 20 25 30 Gly Ser Arg Ser Arg Ala Arg Trp Pro Arg Gly Arg Leu Gly Phe Thr 35 40 45 Ser Met Leu Ser Cys Met Arg Gln Cys Ser Val Cys Arg Met Ile Met 50 55 60 Ser Leu Val Glu Val Leu Val Ala Thr Ser Gln Val Val Lys Leu Trp 75 65 70 80 Ser Arg

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Asn Lys Lys Asn Glu Ala Arg Leu Arg Ile Val Lys Thr Leu Glu Asp 85 90 95 Ile Asp Leu Gly Pro Thr Glu Lys Cys Val Arg Val Asn Ser Val Ser 100 105 110 · Ser Gly Leu Ala Glu Glu Asp Leu Glu Thr Leu Leu Gln Ser Arg Val 115 120 125 Leu Pro Ser Ser Leu Met Leu Pro Lys Val Glu Ser Pro Glu Glu Ile 130 135 140 Gln Trp Ala Val Cys Glu Glu Thr Leu Lys Val Gly Pro Gln Val Gly 145 . 150 155 160 Leu Phe Leu Asp Ala Val Arg Phe Trp Arg Xaa Arg Leu Ser Ser His 165 170 175 Ile Gly Ala Xaa Ser Xaa Lys Glu Thr Leu Asp Xaa Leu Tyr Ala Arg 180 185 .190 Gln Lys Ile Val Val Ile Ala Lys Ala Phe Gly Leu Gln Ala Val Xaa 195 200 205 Leu Xaa Xaa Ile Asp Phe Arg Asp Gly Xaa Xaa Leu Leu Arg Gln Ser 210 215 · 220 Arg Glu Gly Ala Ala Met Gly Phe Thr Gly Lys Gln Val Ile His Pro 225 230 235 240 Asn Gln Ile Ala Val Val Gln Glu Gln Phe Ser Pro Ser Pro Glu Lys 245 250 · 255 Ile Lys Trp Ala Glu Glu Leu Ile Ala Ala Phe Lys Glu His Gln Gln 260 265 270 Leu Gly Lys Gly Ala Phe Thr Phe Gln Gly Ser Met Ile Asp Met Pro 275 280 285 Leu Leu Lys Gln Ala Gln Asn Thr Val Thr Leu Ala Thr Ser Ile Lys 290 295 300 Glu Lys 305 <210> 1602 <211> 92 <212> PRT <213> Homo sapiens <400> 1602 Met Glu Asp Arg Leu Leu Leu Ile Leu Val Phe Pro Leu Leu Trp Phe 5 10 15 1 Pro Val Ala Val Phe Gln Leu Val Leu Leu Leu Pro Phe Leu Leu Ile 20 25 .

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His Ser Leu Asn Cys Leu Glu Trp Arg His Leu Phe Ser Ala Tyr Arg 35 40 45 . Val His Ile Leu Ala Trp Leu Ala Tyr Pro Cys Phe Cys Val Ser Leu 50 55 60 Arg Val Arg His Cys Ile Glu Leu Phe Ile Gln Ile Val Leu Ser Leu 65 70 75 80 Pro Gln Cys Cys Gly Ile Gly Gly Val Pro Ile Leu 85 90 <210> 1603 <211> 69 . . <212> PRT <213> Homo sapiens <220> <221> SITE <222> (59) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1603 Met Pro Thr Ser Ile Leu Leu Thr Trp His Leu Leu Thr Trp His Leu 1 5 . . 10 15 Leu Gly Cys His Lys Thr Asp Lys Ser Phe His Val Arg Leu Asp Thr 20 25 30 Cys Gln Gly Gly Val Ser Lys Leu Gly His Arg Gln His Pro Arg Pro . 35 40 - 45 Gly His Trp Val Glu Glu Thr Val Leu Gly Xaa Thr Arg Arg Glu Gly 50 55 60 Pro Gly Leu Phe Pro 65 . <210> 1604 <211> 69 <212> PRT <213> Homo sapiens <400>,1604 Met Pro Thr Ser Ile Leu Leu Thr Trp His Leu Leu Thr Trp His Leu 5 1 10 15 Leu Gly Cys His Lys Thr Asp Lys Ser Phe His Val Arg Leu Asp Thr 25 20 30 . Cys Gln Gly Gly Val Ser Lys Leu Gly His Arg Gln His Pro Arg Pro 35 40 45 Gly His Trp Val Glu Glu Thr Val Leu Gly Arg Ser Arg Arg Glu Gly 50 55 . 60

Pro Gly Leu Phe Pro 65 <210> 1605 <211> 76 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (67) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (74) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1605 Met Ile Trp Arg Ser Arg Ala Gly Ala Glu Leu Phe Ser Leu Met Ala 1 · 5 10 15 Leu Trp Glu Trp Ile Ala Leu Ser Leu His Cys Trp Val Leu Ala Val 20 25 30 Ala Ala Val Ser Asp Gln His Ala Thr Ser Pro Phe Asp Trp Leu Leu 35 40 45 Ser Asp Lys Gly Pro Phe His Arg Ser Gln Glu Tyr Thr Asp Phe Val 50 . 55 60 Asp Arg Xaa Arg Gln Gly Phe Ser Thr Xaa Tyr Lys 65 70 75 -<210> 1606 <211> 201 <212> PRT <213> Homo sapiens <400> 1606 Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro 1 5 10 . 15 Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala 20 25 · . 30 Val His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile 35 40 45 Glu Ala Val Ser Asn Val His Asn Leu Asn Ser Val Lys Glu Ser Pro 50 · 55 60 His Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr 65 70 75 80 Val Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp

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Val Lys Phe Leu Pro / 100	Leu Lys Lys	Gln Pro Gly Gln 105	Pro Arg Pro Thr 110
Ser Lys Pro Pro Ala . 115	Ser Gly Ala 120		Ser Thr Ser Gly 125
Ile Thr Pro Gly Gln 130	Ala Ala Ala 135	Ile Ala Ser Thr 140	Thr Ile Met Val
Pro Phe Gly Léu Ile 145	Phe Ile Val 150	Phe Ala Val His 155	Phe Tyr Arg Ser 160
Leu Val Ser His Lys 165		Gln Phe.Gln Glu 170	Leu Asn Glu Leu 175
Ala Glu Phe Ala Arg 180	Leu Gln Asp	Gln Leu Asp His 185	Arg Gly Asp His 190
Pro Leu Thr Pro Gly 195	Ser His Tyr 200		• .
	• ·		•
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Ser Ser Ala Arg Cys 20	Ser Ser		
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VIII NOMO SAPIENS			
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Ala Gln Asn Ser Ile 20	Cys Cys Leu	'Pro Cys Asn Leu 25	Arg Thr Asn Thr . 30

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His Leu Leu Tyr Asn Pro Arg Arg Gly Asp Ile Lys Leu Thr Gln Leu 35 40 45	
Ala Met Leu Leu Ala Glu Ile Ser Ser Val Ala His Gln Lys Asp Gly 50 55 60	
Ser Phe Cys Pro Ile Val Met Cys Gly Asp Phe Asn Ser Val Pro Gly65707580	
Ser Pro Leu Tyr Ser Phe Ile Lys Glu Gly Lys Leu Asn Tyr Glu Gly 85 90 95	
Leu Pro Ile Gly Lys Val Ser Gly Gln Glu Gln Ser Ser Arg Gly Gln 100 105 110	
Arg Ile Leu Ser Ile Pro Ile Trp Pro Pro Asn Leu Gly Ile Ser Gln115120125	
Asn Cys Val Tyr Glu Val Gln Gln Val Pro Lys Val Glu Lys Thr Asp 130 135 140	
Ser Asp Leu Thr Gln Thr Gln Leu Lys Gln Thr Glu Val Leu Val Thr 145 150 155 160	
Ala Glu Lys Leu Ser Ser Asn Leu Gln His His Phe Ser Leu Ser Ser 165 170 175	
Val Tyr Ser His Tyr Phe Pro Asp Thr Gly Ile Pro Glu Val Thr Thr 180 185 190	
Cys His Ser Arg Ser Ala Ile Thr Val Asp Tyr Ile Xaa Leu Leu Cys 195 200 205	
Arg Lys Gly Xaa Cys Cys Trp Ala Pro Arg Ser 210 215	
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1 5 10 15 Leu Val Cys Asp Arg Val Glu Arg Gly Thr His Phe Trp Leu Leu Val	
20 25 30 Phe Met Pro Leu Phe Phe Val Ser Pro Val Ser Val Ala Ala Cys Val	
35 40 45	
Trp Gly Phe Arg His Asp Arg Ser Leu Glu Leu Glu Ile Leu Cys Ser 50 55 60	
Val Asn Ile Leu Gln Phe Ile Phe Ile Ala Leu Lys Leu Asp Arg Ile 65 70 75 80	

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Ile His Trp Pro Trp Leu Val Val Phe Val Pro Leu Trp Ile Leu Met 85 90 95
Ser Phe Leu Cys Leu Val Val Leu Tyr Tyr Ile Val Trp Ser Leu Leu 100 105 110
Phe Leu Arg Ser Leu Asp Val Val Ala Glu Gln Arg Arg Thr His Val 115 120 125
Thr Met Ala Ile Ser Trp Ile Thr Ile Val Val Pro Leu Leu Thr Phe 130 135 140
Glu Val Leu Leu Val His Arg Leu Asp Gly His Asn Thr Phe Ser Tyr145150150155160
Val Ser Ile Phe Val Pro Leu Trp Leu Ser Leu Leu Thr Leu Met Ala 165 170 175
Thr Thr Phe Arg Arg Lys Gly Gly Asn His Trp Trp Phe Gly Ile Arg 180 185 190
Arg Asp Phe Cys Gln Phe Leu Leu Glu Ile Phe Pro Phe Leu Arg Glu195200205
Tyr Gly Asn Ile Ser Tyr Asp Leu His His Glu Asp Ser Glu Asp Ala 210 215 220
Glu Glu Thr Ser Val Pro Glu Ala Pro Lys Ile Ala Pro Ile Phe Gly225230235240
Lys Lys Ala Arg Val Val Ile Thr Gln Ser Pro Gly Lys Tyr Val Pro 245 250 255
Pro Pro Pro Lys Leu Asn Ile Asp Met Pro Asp 260 265
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<222> (117) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1610 Met Ile Thr Thr Ala Gly Lys Val Val Val Thr Ile Leu Leu Gly Ser 1 5 10 15 Ser Gly Met Met Leu Pro Ser Leu Thr Ser Ser Val Tyr Phe Phe Val . • 25 20 30 Phe Leu Gly Leu Cys Thr Trp Trp Ser Trp Cys Arg Thr Phe Asp Pro 35 40 45 Leu Leu Phe Ser Cys Leu Cys Val Leu Leu Ala Ile Phe Thr Ala Gly 50 55 60 His Leu Ile Gly Leu Tyr Leu Tyr Gln Phe Gln Phe Gln Glu Ala 65 . 70 75 80 Val Pro Pro Asn Asp Tyr Tyr Ala Ser Phe Gly Xaa Xaa Glu Glu Phe 85 90 95 Phe Tyr Ser Thr Gly Thr Glu Leu Ile Ile Pro Xaa Arg Leu Leu Gln . 100 . 105 110 Ala His His Asn Xaa Thr Tyr Lys Gln Xaa Tyr 115 120 . . . . . . <210> 1611 . <211> 52 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (37) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1611 Pro Gly Leu Arg Lys Asn Arg Pro Ser Val Pro Arg Arg Ser Ser Pro 1 5 10. 15 Gly Arg Ile Ser Gly Leu Ser Ser Val Ala Trp Asn Pro Asp His Ser 20 25 30 Ile Ser Val Phe Xaa Leu Ala Glu Leu Thr Ser Arg Ala Gln Leu Ala 35 . 40 45 . Val Gly Val Ser

50

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65707580Val Pro Pro Asn Asp Tyr Tyr Ala Ser Phe Gly Gln Ser Glu Glu Phe859095

Phe Tyr Ser Thr Gly Thr Glu Leu Ile Ile Pro 100 105

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<223> Xaa equals any of the naturally occurring L-amino acids <400> 1616 . Ile Trp Ala Ile Asp Val Phe Ala Phe Cys Leu Ile Phe Phe Tyr Lys 1 5 10 15 Xaa Xaa Val Arg Gly Ile His Leu Phe Ile Cys Cys Thr Asp Leu Ile 20 25 30 ... Met Ile Leu Met Phe Glu Arg Leu His Leu Phe Ala Phe Thr Ile Cys 35 40 45 Gly Val Lys Tyr Ile Phe Cys Ser Gln Tyr Met Lys Ile Trp Ser Asn 50 55 60 Leu Asn Ser Lys Gln Thr Phe Cys Gly Cys Leu Phe Leu Tyr Trp Gln 65 70 75 80 Ser Ile Asn <210> 1617 <211> 182 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (119) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (120) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (149) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (151) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (154) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1617 Met Val Ile Tyr Val Thr Leu Ala Leu Trp Pro Gln Ile Ile Gln Lys 1 5 10 15 Lys Ala Asn Gly Asn Cys Phe Trp His Phe Gly Leu Leu Leu Lys Leu 20 25 30 . .

Gly Phe Leu Leu Leu Phe Ile Cys Phe Leu Ala Tyr Ser Gln Gly Ala 35 40 45 Phe Glu Lys Ile Phe Ser Leu Trp Pro Leu Ser Lys Cys Phe Glu Leu 50 55 60 Lys Gly Asn Val Tyr Glu Trp Trp Phe Arg Trp Arg Leu Asp Arg Tyr 65 70 . 75 80 Val Val Phe His Gly Met Leu Phe Ala Phe Ile Tyr Leu Ala Leu Gln 85 90 95 Lys Arg Gln Ile Leu Ser Glu Gly Lys Gly Glu Pro Leu Phe Ser Asn 100 105 110 Lys Ile Ser Asn Phe Leu Xaa Xaa Ile Ser Val Val Ser Phe Leu Thr. 120 115 125 Tyr Ser Ile Trp Ala Ser Ser Cys Lys Asn Lys Ala Glu Cys Asn Glu 130 135 140 Leu His Pro Ser Xaa Ser Xaa Val Gln Xaa Leu Ala Phe Ile Leu Ile 145 150 155 . 160 Arg Asn Ile Pro Gly Tyr Ala Arg Gln Phe Thr Val His Phe Leu Leu · 165 170 175 Gly Leu Glu Lys Phe His 180 <210> 1618 <211> 95 <212> PRT <213> Homo sapiens <400> 1618 Met Arg Ser Gln His Ile Thr Trp Cys Leu Leu Phe Ser Ser Pro Leu 1 5 . 10 15 Ala Thr Leu Pro Ala Ala Leu Pro Leu Gly Ala Cys Ala Ala Val Phe · 20 25 . 30 Thr Val Ile Gly Ser Glu Lys Gln Ser Glu Cys Ser Leu Leu Arg Glu 35 40 .Ser Arg Ala Lys Tyr His Gly Cys Thr His Gly Gln Ile Ser Ser Ser  $\leq$ 50 55 60 Leu Lys Gln His Pro Arg Trp Met Tyr Ser His Gln Glu Asp Leu Lys 65 70 75 80 Val Trp Ser Leu Val Glu Lys Lys Gln Lys Gln Cys Met Gly Asp 85 90 95 .

<210> 1619 <211> 95

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<212> PRT <213> Homo sapiens <400> 1619 Met Arg Ser Gln His Ile Thr Trp Cys Leu Leu Phe Ser Ser Pro Leu 1 5 10 15 Ala Thr Leu Pro Ala Ala Leu Pro Leu Gly Ala Cys Ala Ala Val Phe 20 25 30 Thr Val Ile Gly Ser Glu Lys Gln Ser Glu Cys Ser Leu Leu Arg Glu 35 40 Ser Arg Ala Lys Tyr His Gly Cys Thr His Gly Gln Ile Ser Ser Ser 50 55 .60 . Leu Lys Gln His Pro Arg Trp Met Tyr Ser His Gln Glu Asp Leu Lys 70 65 75 80 Val Trp Ser Leu Val Glu Lys Lys Gln Lys Gln Cys Met Gly Asp 85 90 95 <210> 1620 <211> 706 <212> PRT <213> Homo sapiens <400>.1620 Met Leu His Ala Leu Gln His Pro Cys Ile Val Ala Leu Ile Gly Ile 1 5 10 15 Ser Ile His Pro Leu Cys Phe Ala Leu Glu Leu Ala Pro Leu Ser Ser 20 25 30 Leu Asn Thr Val Leu Ser Glu Asn Ala Arg Asp Ser Ser Phe Ile Pro 35 40 45 Leu Gly His Met Leu Thr Gln Lys Ile Ala Tyr Gln Ile Ala Ser Gly 50 55 60 Leu Ala Tyr Leu His Lys Lys Asn Ile Ile Phe Cys Asp Leu Lys Ser 65 70 75 . 80 Asp Asn Ile Leu Val Trp Ser Leu Asp Val Lys Glu His Ile Asn Ile 85 90 95 Lys Leu Ser Asp Tyr Gly Ile Ser Arg Gln Ser Phe His Glu Gly Ala 100 105 110 --Leu Gly Val Glu Gly Thr Pro Gly Tyr Gln Ala Pro Glu Ile Arg Pro 115 120 125 Arg Ile Val Tyr Asp Glu Lys Val Asp Met Phe Ser Tyr Gly Met Val 130 135 140 Leu Tyr Glu Leu Leu Ser Gly Gln Arg Pro Ala Leu Gly His His Gln 145 ; 150 . 155 160

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Leu	Gln	Ile	Ala	Lys 165	Lys	Leu	Ser	Lys	Gly 170	Ile	Arg	Pro	Val	Leu 175	Gly
Gln	Pro	Glu	Glu 180	Val	Gln	Phe	Arg	Arg 185	Leu	Gln	Ala	Leu	Met 190	Met	Glu
Суs	Trp	Asp 195	Thr	Lys	Pro	Glu	Lys 200	Arg	Pro	Leu	Ala	Leu 205	Ser	Val	Val
Ser	Gln 210	Met	Lys	Asp	Pro	Thr 215	Phe	Ala	Thr	Phe	Met 220	Tyr	Glu	Leu	Cys
Cys 225	Gly	Lys	Gln	Thr	Ala 230	Phe	Phe	Ser	Ser	Gln 235	Gly	Gln	Glu	Tyr	Thr 240
Val	Val	Phe	Trp	Asp 245	Gly	Lys	Glu	Glu	Ser 250	Arg	Asn	Tyr	Thr	Val 255	Val
Asn	Thr	Glu	Lys 260	Gly	Leu	Met	Glu	Val 265	Gln	Arg	Met	Cys	Cys 270	Pro	Gly
Met	Lys	Val 275	Ser	Cys	Gln	Leu	Gln 280	Val	Gln	Arg	Ser	Leu 285	Trp	Thr'	Ala
. Thr	Glu 290	Asp	Gln	Lys	Ile	Tyr 295	Ile	Tyr	Thr	Leu	Lys 300	Gly	Met	Cys	Pro
Leu 305		Thr	Pro	Gln	Gln 310	Ala	Leu	Asp	Thr	Pro 315	Ala	Val	Val	Thr	Cys 320
Phe	Leu	Ala	Val	Pro 325	Val	Ile	Lys	Lys	Asn 330	Ser	Tyr	Leu	Val	Leu 335	Ala
Gly	Leu	Ala	Asp 340	Gly	Leu	Val	Ala	Val 345	Phe	Pro	Val	Val	Arg 350	Gly	Thr
Pro	Lys	Asp 355	Ser	Cys	Ser	Tyr	Leu 360	Cys	Ser	His	Thr	Ala 365	Asn	Arg	Ser
Lys	Phe 370	Ser	Ile	Ala	Asp	Glu 375	Asp	Ala	Arg	Gln	Asn 380	Pro	Tyr	Pro	Val
Lys 385	Ala	Met	Glu	Val	Val 390	Asn	Ser	Gly	Ser	Glu 395	Val	Trp	Tyr	Ser	Asn 400
Gly	Pro	Gly	Leu	Leu 405	Val	Ile	Asp	Cys	Ala 410	Ser	Leu	Glu	Ile	Cys 415	Arg
Arg	Leu	Glu	Pro 420	Tyr	Met	Ala	Pro	Ser 425	Met	Val	Thr	Ser	Val 430	Val	Суз
Ser	Ser	Glu 435	Gly	Arg	Gly	Glu	Glu 440	Val	Val	Trp	Cys	Leu 445	Asp	Asp	Lys
Ala	Asn 450	Ser	Leu	Val	Met	Tyr 455	His	Ser	Thr	Thr	Tyr 460	Gln	Leu	Cys	Ala
Arg 465	Tyr	Phe	Cys ,	Gly	Val 470	Pro	Ser	Pro	Leu	Arg 475	Asp	Met	Phe	Pro	Val 480

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Arg Pro Leu	Asp Thr 485	Glu Pro	Pro	Ala	Ala 490	Ser	His	Thr	Ala	Asn 495	Pro.	
Lys Val Pro	Glu Gly 500	Asp Ser	Ile	Ala 505	Asp	Val	Ser	Ile	Met 510	Tyr	Ser	
Glu Glu Leu 515	Gly Thr	Gln Ile	Leu 520	Ile -	His	Gln	Glu	Ser 525	Leu	Thr	Asp	
Tyr Cys Ser 530	Met Ser	Ser Tyr 535		Ser	Ser	Pro	Pro 540	Arg	Gln	Ala	Ala	
Arg Ser Pro 545	Ser Ser	Leu Pro 550	Ser	Ser	Pro	Ala 555	Ser	Ser	Ser	Ser	Val 560	
Pro Phe Ser .	Thr Asp 565	Cys Glu	Asp	Ser	Asp 570	Met	Leu	His	Thr	Pro 575	Gly.	
Ala Ala Ser	Asp Arg 580	Ser Glu	His	Asp 585	Leu	Thr	Pro	Met	Asp 590	Gly	Glu	•
Thr Phe Ser 595	Gln His	Leu Gln	Ala 600	Val	Lys	Ile	Leu	Ala 605	Val	Arg	Asp	
Leu Ile Trp 610	Val Pro	Arg Arg 615	Gly	Gly	Asp	Val	Ile 620	Val	Ile	Gly	Leu	·
Glu Lys Asp 625	Ser Glu	Ala Gln 630	Arg	Gly	Arg	Val 635 ⁄	Ile	Ala	Val	Leu	Lys 640	•
Ala Arg Glu	Leu Thr 645	Pro His	Gly	Val	Leu 650	Val	Asp	Ala	Ala	<u>Val</u> 655	Val	
Ala Lys Asp	Thr Val 660	Val Cys	Thr	Phe 665	Glu	Asn	Glu	Asn	Thr 670 <sub>.</sub>	Glu	Trp	
Cys Leu Ala <sup>°</sup> 675			680					685	_			
Tyr Gln Ser 690	Tyr Glu	Glu Leu 695	Gly	Arg	Leu	Glu	Ala 700	Cys	Thr	Arg	Lys	
Arg Arg 705											•	
<210> 1621		. ,									. '	
<211> 706 <212> PRT <213> Homo s	apiens	·		•			•			•		
<400> 1621 Met Leu His .		Gln His	Pro	Cvs	Ile	Val	Ala	Теп	TIA	Glv	T]a	
1	5		110	67.0	10	*	*J70	Jucu	776	15	*7C	

Ser Ile His Pro Leu Cys Phe Ala Leu Glu Leu Ala Pro Leu Ser Ser 20 25 30

Leu Asn Thr Val Leu Ser Glu Asn Ala Arg Asp Ser Ser Phe Ile Pro 1007 • • •

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35 40 45 Leu Gly His Met Leu Thr Gln Lys Ile Ala Tyr Gln Ile Ala Ser Gly 55 50 60 Leu Ala Tyr Leu His Lys Lys Asn Ile Ile Phe Cys Asp Leu Lys Ser 65 70 75 80 Asp Asn Ile Leu Val Trp Ser Leu Asp Val Lys Glu His Ile Asn Ile 85 90 95 Lys Leu Ser Asp Tyr Gly Ile Ser Arg Gln Ser Phe His Glu Gly Ala 100 105 110 . Leu Gly Val Glu Gly Thr Pro Gly Tyr Gln Ala Pro Glu Ile Arg Pro • . 115 120 125 • Arg Ile Val Tyr Asp Glu Lys Val Asp Met Phe Ser Tyr Gly Met Val · 130 135 ( . 140 Leu Tyr Glu Leu Leu Ser Gly Gln Arg Pro Ala Leu Gly His His Gln 145 . 150 155 160 Leu Gln Ile Ala Lys Lys Leu Ser Lys Gly Ile Arg Pro Val Leu Gly 165 170 175 · . Gln Pro Glu Glu Val Gln Phe Arg Arg Leu Gln Ala Leu Met Met Glu 185 180 190 Cys Trp Asp Thr Lys Pro Glu Lys Arg Pro Leu Ala Leu Ser Val Val . 195 205 200 Ser Gln Met Lys Asp Pro Thr Phe Ala Thr Phe Met Tyr Glu Leu Cys 210 215 220 Cys Gly Lys Gln Thr Ala Phe Phe Ser Ser Gln Gly Gln Glu Tyr Thr . .225 230 235 240 . Val Val Phe Trp Asp Gly Lys Glu Glu Ser Arg Asn Tyr Thr Val Val 245 250 255 Asn Thr Glu Lys Gly Leu Met Glu Val Gln Arg Met Cys Cys Pro Gly . 270... 260 265 Met Lys Val Ser Cys Gln Leu Gln Val Gln Arg Ser Leu Trp Thr Ala 275 280 285 ٩. Thr Glu Asp Gln Lys Ile Tyr Ile Tyr Thr Leu Lys Gly Met Cys Pro 290 . 295 300 Leu Asn Thr Pro Gln Gln Ala Leu Asp Thr Pro Ala Val Val Thr Cys 305 310 315 . . 320 Phe Leu Ala Val Pro Val Ile Lys Lys Asn Ser Tyr Leu Val Leu Ala 325 330 . 335 Gly Leu Ala Asp Gly Leu Val Ala Val Phe Pro Val Val Arg Gly Thr · 340<sup>·</sup> 345 350 Pro Lys Asp Ser Cys Ser Tyr Leu Cys Ser His Thr Ala Asn Arg Ser

. 360 355 365 Lys Phe Ser Ile Ala Asp Glu Asp Ala Arg Gln Asn Pro Tyr Pro Val 375 380 Lys Ala Met Glu Val Val Asn Ser Gly Ser Glu Val Trp Tyr Ser Asn 385 390 395 400 Gly Pro Gly Leu Leu Val Ile Asp Cys Ala Ser Leu Glu Ile Cys Arg 405 410 Arg Leu Glu Pro Tyr Met Ala Pro Ser Met Val Thr Ser Val Val Cys • 420 425 Ser Ser Glu Gly Arg Gly Glu Glu Val Val Trp Cys Leu Asp Asp Lys 435 440 445 . Ala Asn Ser Leu Val Met Tyr His Ser Thr Thr Tyr Gln Leu Cys Ala 450 455 460 Arg Tyr Phe Cys Gly Val Pro Ser Pro Leu Arg Asp Met Phe Pro Val 465 . 470 475 480 Arg Pro Leu Asp Thr Glu Pro Pro Ala Ala Ser His Thr Ala Asn Pro 485 • 490 495 Lys Val Pro Glu Gly Asp Ser Ile Ala Asp Val Ser Ile Met Tyr Ser · 500 505 510 Glu Glu Leu Gly Thr Gln Ile Leu Ile His Gln Glu Ser Leu Thr Asp 515 520 525 Tyr Cys Ser Met Ser Ser Tyr Ser Ser Ser Pro Pro Arg Gln Ala Ala 530 535 540 Arg Ser Pro Ser Ser Leu Pro Ser Ser Pro Ala Ser Ser Ser Val 545 . 550 555 🕐 560 Pro Phe Ser Thr Asp Cys Glu Asp Ser Asp Met Leu His Thr Pro Gly 570 565 575 Ala Ala Ser Asp Arg Ser Glu His Asp Leu Thr Pro Met Asp Gly Glu 580 585 590 Thr Phe Ser Gln His Leu Gln Ala Val Lys Ile Leu Ala Val Arg Asp 595 600 605 Leu Ile Trp Val Pro Arg Arg Gly Gly Asp Val Ile Val Ile Gly Leu 610 615 620 Glu Lys Asp Ser Gly Ala Gln Arg Gly Arg Val Ile Ala Val Leu Lys 625 630 635 640 Ala Arg Glu Leu Thr Pro His Gly Val Leu Val Asp Ala Ala Val Val 645 650 . 655 Ala Lys Asp Thr Val Val Cys Thr Phe Glu Asn Glu Asn Thr Glu Trṗ 660 665 . . 670 Cys Leu Ala Val Trp Arg Gly Trp Gly Ala Arg Glu Phe Asp Ile Phe

685 675 680 Tyr Gln Ser Tyr Glu Glu Leu Gly Arg Leu Glu Ala Cys Thr Arg Lys 695 690 700 Arg Arg 705 <210> 1622 <211> 196 <212> PRT <213> Homo sapiens . <220> <221> SITE <222> (171) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (175) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (177) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE .<222> (181) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (185) <223> Xaa equals any of the naturally occurring L-amino acids . . • <220> <221> SITE <222> (188) ۰. <222> Xaa equals any of the naturally occurring L-amino acids <22.0> <221> SITE <222> (189) <223> Xaa equals any of the naturally occurring L-amino acids <220> . . <221> SITE <222> (193) <223> Xaa equals any of the naturally occurring L-amino acids . . <400> 1622 Met Ser Leu Leu Val Asp Gly Asp Met Asn Leu Ser Ile Ile Met Thr 5 10 15 1 Ile Ser Ser Thr Leu Leu Ala Leu Val Leu Met Pro Leu Cys Leu Trp .

20	)	25		30.	L
Ile Tyr Ser Trg 35	) Ala Trp Il	le Asn Thr 40	Pro Ile Val	Gln Leu Leu 45	Pro
Leu Gly Thr Val 50 .		nr Leu Cys 55	Ser Thr Leu 60	Ile Pro Ile	Gly
Leu Gly Val Phe 65	e Ile Arg Ty 70	vr Lys Tyr	Ser Arg Val 75	Ala Asp Tyr	Ile 80
Val Lys Val Ser	Leu Trp Se 85	er Leu Leu	Val Thr Leu 90	Val Val Leu 95	Phe
Ile Met Thr Gly 100		nu Gly Pro . 105	Glu Leu Leu	Ala Ser Ile 110 <sub>.</sub>	Pro
Ala Ala Val Tyr 115	Val Ile Al	a Ile Phe 120	Met Pro Leu	Ala Gly Tyr 125	Ala
Ser Gly Tyr Gly 130	Leu Ala Th 13		His Leu Pro 140	Pro Asn Cys	Lys
Arg Thr Val Cys 145	Leu Glu Th 150	r Gly Ser	Gln Asn Val 155	Gln Leu Cys	Thr 160
Ala Ile Leu Lys	Leu Ala Ph 165	e His Arg	Ile Xaa Arg 170	Lys His Xaa · 175	His
Xaa Ser Phe Ala 180		r Phe Xaa · 185	Val Cys Xaa	Xaa Gly Asp 190	Phe
Xaa Phe Asn Leu 195				·	
	•				
<210> 1623 <211> 69 <212> PRT	·		•	•	
<213> Homo sapi	ens		•		
<400> 1623	• •				
Met Asp Phe Asn 1	Leu Gly Le 5	u Pro Gly	Ala Gly Pro 10	Pro Arg Leu 15	Leu
Arg Leu Gly Leu 20		u Ala Leu 25	Ala Cys Phe	Arg Cys Leu 30	Thr
Gly Leu Phe Leu 35	Phe Met Al	a Trp Leu 40	His Ser Asp	Leu Gly Trp 45	Gly
His Ile Gln Pro 50	Thr Ala Hi 5		Ser Val Trp 60	Pro Ala Pro	Arg
Phe Gln Pro Gln	Trp				

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<210> 1624 <211> 199 <212> PRT <213> Homo sapiens <400> 1624 Phe Ser Gly Val Cys Phe Ala Gly Ile Ala Gly Ser Met Ala Thr Leu 1 5 . · 10 Leu His Asp Ala Val Met Asn Pro Ala Glu Val Val Lys Gln Arg Leu 20 25 30 Gln Met Tyr Asn Ser Gln His Arg Ser Ala Ile Ser Cys Ile Arg Thr 35 40 45 Val Trp Arg Thr Glu Gly Leu Gly Ala Phe Tyr Arg Ser Tyr Thr Thr 50 55 60 Gln Leu Thr Met Asn Ile Pro Phe Gln Ser Ile His Phe Ile Thr Tyr 65 70 75 80 Glu Phe Leu Gln Glu Gln Val Asn Pro His Arg Thr Tyr Asn Pro Gln 85 90 95 Ser His Ile Ile Ser Gly Gly Leu Ala Gly Ala Leu Ala Ala Ala Ala 100 105 110 Thr Thr Pro Leu Asp Val Cys Lys Thr Leu Leu Asn Thr Gln Glu Asn 115 . 120 125 Val Ala Leu Ser Leu Ala Asn Ile Ser Gly Arg Leu Ser Gly Met Ala 130 135 140 Asn Ala Phe Arg Thr Val Tyr Gln Leu Asn Gly Leu Ala Gly Tyr Phe 145 150 155 160 Lys Gly Ile Gln Ala Arg Val Ile Tyr Gln Met Pro Ser Thr Ala Ile 170 165 175 Ser Trp Ser Val Tyr Glu Phe Phe Lys Tyr Phe Leu Thr Lys Arg Gln 180 . 185 190 Leu Glu Asn Arg Ala Pro Tyr 195 · <210> 1625 <211> 69<sup>.</sup> <212> PRT <213> Homo sapiens <400> 1625 Met Asp Phe Asn Leu Gly Leu Pro Gly Ala Gly Pro Pro Arg Leu Leu 1 . 5 · . 10 15 Arg Leu Gly Leu Cys Val Leu Ala Leu Ala Cys Phe Arg Cys Leu Thr 20 25 30 Gly Leu Phe Leu Phe Met Ala Trp Leu His Ser Asp Leu Gly Trp Gly

- 35 40 45 His Ile Gln Pro Thr Ala His Trp Leu Ser Val Trp Pro Ala Pro Arg . 55 " 50 60 Phe Gln Pro Gln Trp 65 <210> 1626 <211> 91 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (84) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1626 Met Ala Arg Val Leu Gln Leu Glu Pro Gln Thr Ser Ala Cys Leu Leu 1 5 10 15 . • Ser Leu Leu Cys Pro Ala Leu Gln Glu Pro Gly Pro Ala Ser Gly Thr 20 25 . 30 Glu Ser Ala His Phe Leu Arg Ala His Ser Arg Cys Gly Pro Gly Leu . 35 45 40 Pro Pro Pro His Val Ser Ser Pro Gln Pro Thr Pro Pro Gly Pro Glu 50 55 60 Ala Lys Val Arg Gly Cys Met Gly Ala Arg Trp Trp Leu Gly Arg Ala 65 70 75 80 Pro Gly Val Xaa Gly Val Phe Arg Asp Thr Thr 85 . 90 . . . . . . <210> 1627 <211> 137 <212> PRT <213> Homo sapiens . <220> <221> SITE <222> (15) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE . <222> (39) . <223> Xaa equals any of the naturally occurring L-amino acids . <400> 1627 . Ala His Cys His Ile Ser Arg Ser His Cys Pro Thr Leu Arg Xaa Lys • 10 5 1 15 · .

Asp Thr Cys Gly Gly Trp Glu Pro Thr Ser Ala Leu Gly Ser Ser Thr 20 25 30 Leu Ser His Val Pro His Xaa Leu Leu Glu Arg Arg Asp Leu Trp Arg 35 40 45 Arg Glu Ala Glu Ala Arg Lys Gln Ser Gln Pro Asp Pro Ala Met Pro 55 50 . 60 . Pro Gly His Thr Arg Met Pro Glu Asn Gln Arg Leu Glu Thr Leu Thr 65 70 75 80 Lys Leu Leu Gln Ser Gln Ser Gln Leu Leu Arg Glu Leu Val Leu Leu • 85 90 95 Pro Ala Gly Ala Asp Ser Leu Arg Ala Gln Ser His Arg Ala Glu Leu . 100 . 105 110 . Asp Arg Lys Leu Val Gln Val Glu Glu Ala Ile Lys Ile Phe Ser Arg 115 120 125 Pro Lys Val Phe Val Lys Met Asp Asp 130 135 <210> 1628 <211> 95 <212> PRT <213> Homo sapiens <400> 1628 Met Ala Trp Ala Pro Ala Cys Val Gln Ala Gln Gly Leu Ser Cys Leu 1 5 10 . 15 Cys Leu Phe Pro Asp Pro Ser Ser Cys Arg Glu Trp Cys Cys Pro Leu 20 . 25 30 -Gly Met Tyr Leu Gln Val Glu Thr Arg Thr Ser Ser Arg Leu His Leu 35 40 45 Lys Arg Ala Pro Gly Ile Arg Ser Trp Ser Leu Leu Val Gly Lys Ala 50 55 60 Leu His Val Pro Pro Gln Asn Pro Arg Thr Gly Ser Leu Thr Phe Lys ·65 70. 75 . 80 Lys Asp Glu Asn Glu Thr Lys Tyr Phe Leu Phe Phe Leu Leu Pro 85 90 95 <210> 1629 <211> 189

<212> PRT <213> Homo sapiens

<220> <221> SITE <222> (81)

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<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (163) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1629 Val Gln Leu Ser Val Pro Ala Gly Met Leu His Ser Leu Cys Val Gln 1 5. 10 15 Leu Phe Ile Thr Ala Gly Ser Leu Cys Ala Thr His Ser Gln Cys Leu 20 25. - 30 -Ser Lys Ala Asp Gly Ala Arg Pro Ser Ile Leu Tyr Leu Thr Cys Pro 35 40 45 Leu His Ser Pro Ile Lys Asn Gly Pro Gln Ile Arg Val Glu Glu Ala 50 55 • . . 60 Asp Val Ser Ser Ser Glu Thr Ala Leu Pro Arg Ser Arg Arg Asp Gly 65 70 . 75 80 . Xaa Ala Lys Pro Gly Cys Glu Thr Gly Cys Cys Met Trp Leu Gln Ala , 85 90 95 Leu Asn Ile Val Thr Trp Arg Leu Pro Gln His Ile Val Arg Ser Lys 100 105 110 Pro Gln Glu Pro Glu Gln Gln Asn Ser Cys His Pro Gln Lys Pro Ala 115 . 120 125 . Pro Gly Thr Ala Val Gln Ile Gly Arg Arg Ser Ser Gln Gln Trp Leu 130 135 140 · Leu Arg Thr Pro Leu Thr Gln Gln Arg Ser Pro Asp Ala Cys Arg Ser 145 . 150 155 160 Pro Glu Xaa Ala Leu Ser Ala Leu Asp Met Ala Gly Asp Thr GIn Val 165 170 175 Trp Pro Ser Gln Ser Leu Phe Ala Lys Leu Lys Val Lys 180 ^ 185 . <210> 1630 .- . <211> 95 <212> PRT <213> Homo sapiens <400> 1630 Met Ala Trp Ala Pro Ala Cys Val Gln Ala Gln Gly Leu Ser Cys Leu 1 5 10 15 Cys Leu Phe Pro Asp Pro Ser Ser Cys Arg Glu Trp Cys Cys Pro Leu 20 25 30 Gly Met Tyr Leu Gln Val Glu Thr Arg Thr Ser Ser Arg Leu His Leu 35 40 45

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c.

Lys Arg Ala Pro Gly Ile Arg Ser Trp Ser Leu Leu Val Gly Lys Ala 55 60 50 Leu His Val Pro Pro Gln Asn Pro Arg Thr Gly Ser Leu Thr Phe Lys · 65 70 . 75 . 80 Lys Asp Glu Asn Glu Thr Lys Tyr Phe Leu Phe Phe Leu Leu Pro - 85 . 95 90 <210> 1631 <211> 303 <212> PRT <213> Homo sapiens <220> <221> SITE • <222> (224) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE • <222> (245) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (250) <223> Xaa equals any of the naturally occurring L-amino acids ·. \* <220> <221> SITE <222> (252) <223> Xaa equals any of the naturally occurring L-amino acids · . <220> · · \_ · <221> SITE <222> (255) <223> Xaa equals any of the naturally occurring L-amino acids <220> -: <221> SITE . <222> (256) <223> Xaa equals any of the naturally occurring L-amino acids ·. . <220> . · <221> SITE . <222> (257) <223> Xaa equals any of the naturally occurring L-amino acids . . <220> . <221> SITE <222> (287) <223> Xaa equals any of the naturally occurring L-amino acids . . . <220> <221> SITE <222> (301)

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<223> 2	(aa e	qual	s any	y of	the	nati	ırall	ly o	ccuri	ring	L-a	nino	aci	is
<400> 1 Met Ala 1		Ala	Ser 5		Gly	Ala	Thr	Arg 10	Leu	Leu	Leu	Leu	Leu 15	Leu
Met Ala	a Val	Ala 20	Ala	Pro	Ser	Arg	Ala 25	Arg	Gly	Ser	Gly	Cys 30	Arg :	Ala .
Gly Thr	Gly 35	Ala	Arg	Gly	Ala	Gly 40	Ala	Glu	Gly	Arg	Glu 45	Gly	Glu	Ala
Cys Gly 50		Val	Gly	Leu	Leu 55	Leu	Glu	His	Ser	Phe 60	Glu	Ile	Asp	Asp
Ser Ala 65	a Asn	Phe	Arg	Lys 70	Arg	Gly	Ser	Leu	Leu 75	Trp	Asn	Gln	Gln	Asp 80
Gly Thr	Leu	Ser	Leu 85	Ser	Gln	Arg	Gln	Leu 90	Ser	Glu	Glu	Glu	Arg 95	Gly .
Arg Leu	1 Arg	Asp 100	Val	Ala	Ala	Leu	Asn 105	Gly	Leu	Tyr <sub>.</sub>	Arg	Val 110	Arg	Ile
Pro Arg	7 Arg 115	Pro	Gly	Ala	Leu	Asp 120	Gly	Leu	Glu	Ala	Gly 125	Gly	Tyr	Val
Ser Sei 130		Val	Pro	Ala	Cys 135	Ser	Leu	Val	Glu	Ser 140	His	Leu	Ser	Asp
Gln Leu 145	ı.Thr	Leu		Val 150	Asp	Val	Ala	Gly	Asn 155	Val	Val	Gly	Val	Ser 160
Val Val	. Thr	His	Pro 165	Gly	Gly	Cys	Arg	Gly 170	His	Glu	Val	Glu	Asp 175	Val
Asp Leu	ı Glu	Leu 180	Phe	Asn	Thr	Ser	Val 185	Gln	Leu	Gln	Pro	Pro 190	Thr	Thr
Ala Pro	Gly 195	Pro	Glu	Thr		Ala 200	Phe	Ile	Glu	Arg	Leu 205	Glu	Met	Glu
Gln Ala 210		Lys	Ala	Lys ,	Asn 215	Pro	Gln	Glu.	Gln	Lys 220	Ser	Phe	Phe	Xaa
Lys Tyr 225	Trp	Met	Tyr .	Ile 230	Ile	Pro	Val	Val	Leu 235	. Phe	Leu	Met	Met	Ser 240
Gly Ala	Pro	Asp	Xaa 245	Gly	Gly	Gln	Gly	Xaa 250	Gly	Xaa	Gly	Gly	Xaa 255	Xaa
Xaa Gly	val	Val 260	Ala	Gly '	Glu	Gly	Pro 265	Ser	Leu	Ser	Ala	Phe 270	Pro	Ser
Cys Lys	Thr 275		Gly	Gly	Phe	Pro 280	Phe	Cys	Leu	Glu	Phé 285	Pro	Xaa	Cys
Ser Ser 290		.Pro	Ser	Pro	Lys 295	Lys,	Gly	Phe	Cys	Leu 300	Xaa	Pro	Leu	

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<210> 1632 .<211> 173 <212> PRT <213> Homo sapiens <220> <221> SITE ·<222> (99) <223> Xaa equals any of the naturally occurring L-amino acids . <220> <221> SITE <222> (118) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (141) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (164) <223> Xaa equals any of the naturally occurring L-amino acids <220> ` <221> SITE <222> (170) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (172) <223> Xaa equals any of the naturally occurring L-amino acids . <220> <sup>`</sup> <221> SITE <222> (173) <223> Xaa equals any of the naturally occurring L-amino acids . . <400> 1632 . Met Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu 5 10 1 15 Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala 20 25 30 . Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala 35 40 45 ۰. Cys Gly Thr Val Gly Leu Leu Leu Glu His Ser Phe Glu Ile Asp Asp . 50 55 60 . Ser Ala Asn Phe Arg Lys Arg Gly Ser Leu Leu Trp Asn Gln Gln Asp .70 . .75 65 .8 0. Gly Thr Leu Ser Leu Ser Gln Arg Gln Leu Ser Glu Glu Glu Arg Gly 85 ·90 95

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Arg Leu Xaa Asp Val Ala Ala Leu Asn Gly Leu Tyr Arg Val Arg Ile 100 105 110 Pro Arg Arg Pro Gly Xaa Leu Asp Gly Leu Glu Ala Gly Gly Tyr Val 115 120 125 Ser Ser Phe Val Pro Ala Cys Ser Leu Val Glu Ser Xaa Leu Ser Asp 130 135 140 Gln Leu Thr Leu His Val Asp Val Ala Gly Asn Val Val Gly Arg Val 145 150 155 160 Gly Gly Asp Xaa Pro Trp Gly Cys Arg Xaa His Xaa Xaa 165 170 . . <210> 1633 <211> 158 <212> PRT <213> Homo sapiens <400> 1633 · . . Met Ala Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu Leu 1 5 10 15 Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys Arg Ala . 20 25 .30 Gly Thr Gly Ala Arg Gly Ala Gly Ala Glu Gly Arg Glu Gly Glu Ala . 35 40 45 Cys Gly Thr Val Gly Leu Leu Glu His Ser Phe Glu Ile Asp Asp 55 . 60 . 50 . Ser Ala Asn Phe Arg Lys Arg Gly Ser Leu Leu Trp Asn Gln Gln Asp 65 70 75 80 Glý Thr Leu Ser Leu Ser Gln Arg Gln Leu Ser Glu Glu Glu Arg Gly 85 90 95 Arg Leu Arg Asp Val Ala Ala Ser Tyr Leu Asp Cys Gly Ala Thr Arg 100 105 110 Ala Cys Gly Pro Leu Leu Cys Ala Thr Leu Pro Val Ser Leu Phe Lys 115 120 125 Asn Ile Asp Asp Thr Leu Lys Cys Val Asn Val Leu Lys Ser Tyr Ser 130 135 140 Phe Gln Gln Pro Lys Ala Thr Val Val Leu Ala Arg Arg Ser 145 150 155 <210> 1634 <211> 158 <212> PRT <213> Homo sapiens ۰. 1019

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Ile Lys Leu 115

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<213> Homo sapiens

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<400>.1640 Met Arg Thr Asn Gln Ser Leu Cys Ser Phe Leu Leu Trp Ser Val Pro 1 5 10 . 15. Phe His Gln Ala Ala Cys Pro Gln Ala Lys Asp His Pro Leu Glu Pro 20 . 25 3.0 . Ser Met His Pro Glu Gly Thr Gln Leu Gln Ser Cys Ser Thr Met Leu 35 40 45 Gly Pro Arg Gln Leu Ser Ser Glu Lys Gln Pro Leu Leu Pro Pro Arg . - 50 55 60 Ser His Leu Lys Ser Ser Pro Met Leu Arg Ala Cys Lys Gly Leu Thr 65 70 75 80 Ser . <210> 1641 <211> 53 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1641 Met Val Phe Leu Ser His Leu Phe Gly Thr Lys Arg Leu Phe Leu Leu 1 5 10 ' 15 Leu Ala Leu Ile Trp Ala Ser Trp His Phe Ser Tyr Met Pro Ala Asp 20 25 . 30 Ala Trp Val Asp Pro Gly Ile Pro Asp Arg Tyr Leu Gln Ala Tyr Leu • . *,* 35 · 40 . 45 Ser Ile Val Xaa Pro 50 <210> 1642 <211>-61 <212> PRT <213> Homo sapiens <400> 1642 Met His Val Val His Trp Ser Arg Leu Phe Leu Leu Lys Pro Pro Tyr 1 5 10 15 Ser Val His Ala Thr Phe Ile Pro Thr Gly Phe Leu Ala Arg Phe Arg 30 20 •. 25 Thr Pro Gly Ile Leu Asp Ser Cys Phe Phe His Ser Trp Pro Leu Leu

35 40 45 Leu Ser Tyr Phe Leu Ser Pro Gln Ser Pro Leu Lys 50 55 . 60 <210> 1643 <211> 86 <212> PRT <213> Homo sapiens <400> 1643 Met Leu Thr Ala Val Lys Met Phe Arg Leu Ser Ala Val Thr Leu Cys 1 5 10 15 Ala Phe Ser Leu Thr Leu His Ser Gly Val Gln Leu Cys Glu Gln Leu 20 25 30 Val Leu Arg Ile Ala Leu Phe Gln Asn Cys Arg Ala Glu Asp Gly Phe 35 40 45 Gly Leu Arg Val Cys Trp Arg Arg Leu Met Arg Ser Phe Cys Arg Ser 50 55 60 Ala Lys Phe Trp Gly Ser Asn Asp Leu Arg Thr Trp Gly Ser Arg Phe 65 70 75 80 Leu Trp Lys Asp Cys Thr 85 <210> 1644 <211> 86 <212> PRT <213> Homo sapiens <400> 1644 Met Leu Thr Ala Val Lys Met Phe Arg Leu Ser Ala Val Thr Leu Cys 1 5 10 '15 Ala Phe Ser Leu Thr Leu His Ser Gly Val Gln Leu Cys Glù Gln Leu 20 25 30 Val Leu Arg Ile Ala Leu Phe Gln Asn Cys Arg Ala Glu Asp Gly Phe 35 40 45 Gly Leu Arg Val Cys Trp Arg Arg Leu Met Arg Ser Phe Cys Arg Ser 50 55 <sup>,</sup> 60 Ala Lys Phe Trp Gly Ser Asn Asp Leu Arg Thr Trp Gly Ser Arg Phe 65 - . 70 75 80. Leu Trp Lys Asp Cys Thr 85

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Val Arg Arg Leu Ile Gly Val Thr Glu Ile Glu Lys Gly Ser Ser Tyr 100 105 110 Gly Asn Gln Glu Phe Lys Lys Glu 115 120 <210> 1647 <211> 376 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (30) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1647 Met Gly Leu Leu Ala Phe Leu Lys Thr Gln Phe Val Leu His Leu Leu 1 5 10 15 Val Gly Phe Val Phe Val Val Ser Gly Leu Val Ile Asn Xaa Val Gln 25 20 30 Leu Cys Thr Leu Ala Leu Trp Pro Val Ser Lys Gln Leu Tyr Arg Arg 35 40 . 45 . Leu Asn Cys Arg Leu Ala Tyr Ser Leu Trp Ser Gln Leu Val Met Leu 50 55 60 Leu Glu Trp Trp Ser Cys Thr Glu Cys Thr Leu Phe Thr Asp Gln Ala 65 70 75 . 80 Thr Val Glu Arg Phe Gly Lys Glu His Ala Val Ile Ile Leu Asn His · 85 90 95 Asn Phe Glu Ile Asp Phe Leu Cys Gly Trp Thr Met Cys Glu Arg Phe 100. 105 . 110 Gly Val Leu Gly Ser Ser Lys Val Leu Ala Lys Lys Glu Leu Leu Tyr 115 . 120 125 Val Pro Leu Ile Gly Trp Thr Trp Tyr Phe Leu Glu Ile Val Phe Cys 135 130 140 Lys Arg Lys Trp Glu Glu Asp Arg Asp Thr Val Val Glu Gly Leu Arg 145 . . 150 155 160 Arg Leu Ser Asp Tyr Pro Glu Tyr Met Trp Phe Leu Leu Tyr Cys Glu 165 170 · 175 Gly Thr Arg Phe Thr Glu Thr Lys His Arg Val Ser Met Glu, Val Ala 180 185 . 190 Ala Ala Lys Gly Leu Pro Val Leu Lys Tyr His Leu Leu Pro Arg Thr 195 200 · 205 Lys Gly Phe Thr Thr Ala Val Lys Cys Leu Arg Gly Thr Val Ala Ala 215 210 220

Val Tyr Asp Val Thr Leu Asn Phe Arg Gly Asn Lys Asn Pro Ser Leu 225 230 235 240 Leu Gly Ile Leu Tyr Gly Lys Lys Tyr Glu Ala Asp Met Cys Val Arg · 245 250 255 Àrg Phe Pro Leu Glu Asp Ile Pro Leu Asp Glu Lys Glu Ala Ala Gln 260 - 265 270 Trp Leu His Lys Leu Tyr Gln Glu Lys Asp Ala Leu Gln Glu Ile Tyr 275 280 285 ٠. Asn Gln Lys Gly Met Phe Pro Gly Glu Gln Phe Lys Pro Ala Arg Arg 290 295 300 • . Pro Trp Thr Leu Leu Asn Phe Leu Ser Trp Ala Thr Ile Leu Leu Ser 310 305 315 320 Pro Leu Phe Ser Phe Val Leu Gly Val Phe Ala Ser Gly Ser Pro Leu 325 330 335 Leu Ile Leu Thr Phe Leu Gly Phe Val Gly Ala Ala Ser Phe Gly Val . 340 345 350 . Arg Arg Leu Ile Gly Val Thr Glu Ile Glu Lys Gly Ser Ser Tyr Gly 355 360 365 Asn Gln Glu Phe Lys Lys Glu . • 370 375 • • <210> 1648 <211> 164 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (76) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (112) <223> Xaa equals any of the naturally occurring L-amino acids . ' <220> <221> SITE <222> (146) <223> Xaa equals any of the naturally occurring L-amino acids **<400> 1648** Met Arg Thr Leu Val Glu Leu Gly Pro Trp Ala Gly Asp Phe Gly Pro 1 5 10 15 Asp Leu Leu Thr Leu Leu Phe Leu Leu Phe Leu Ala His Gly Val · 25 20 30 .

Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val Ser Leu Gln Glu Phe 35 40 45 Leu Met Ala Glu Gln Ser Leu Pro Gly Thr Leu Leu Lys Leu Ala Ala 50 · 55 . 60 Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu Xaa Arg Leu Cys Trp 70 65 75. 80 . . Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln Ser Leu Met Ala Gln 85 90 95 Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro His Gly Ala Leu Xaa 110 100 <sup>·</sup> . 105 Glu Ala Ala Cys Thr Phe Cys Phe His Leu Thr Leu Leu His Leu Arg 115 120 125 His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val Ala Leu Leu Val Thr 135 . 140 130 Val Xaa Ala Tyr Thr Ala Gly Pro Tyr Val Cys Phe Phe Asn Pro Ala 145 150 155 160 Leu Ala Ala Leu , <210> 1649 <211> 186 <212> PRT <213> Homo sapiens <400> 1649 Met Arg Thr Leu Val Glu Leu Gly Pro Trp Ala Gly Asp Phe Gly Pro 5 - 10 1 • . 15 Asp Leu Leu Leu Thr Leu Leu Phe Leu Leu Phe Leu Ala His Gly Val 20 25 30 Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val Ser Leu Gln Glu Phe 35 40 45 Leu Met Ala Glu Gln Ser Leu Pro Gly Thr Leu Leu Lys Leu Ala Ala 55 50 · 60 Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu Met Arg Leu Cys Trp 75 <sup>·</sup> 65 70 . 80 Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln Ser Leu Met Ala Gln 85 90 95 Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro His Gly Ala Leu Leu 100 .105 110 Glu Ala Ala Cys Thr Phe Cys Phe His Leu Thr Leu Leu His Leu Arg 115 . 120 125

His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val Ala Leu Leu Val Thr

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135 130 140 Val Thr Ala Tyr Thr Ala Gly Pro Phe Thr Ser Ala Phe Phe Asn Pro 145 150 155 160 Ala Leu Ala Ala Ser Val Thr Phe Ala Cys Ser Asp Thr Pro Tyr Trp 165 170 175 Ser Thr Cys Arg Cys Thr Gly Trp Ala Leu • . 180 185 <210> 1650 <211> 206 <212> PRT <213> Homo sapiens . <220> <221> SITE <222> (200) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1650 Met Val Arg Leu Ala Ala Glu Leu Leu Leu Leu Leu Gly Leu Leu 1 5 10 . 15 Leu Thr Leu His Ile Thr Val Leu Arg Gly Ser Gly Ala Ala Asp Gly 20 ' 25 30 Pro Asp Ala Ala Ala Gly Asn Ala Ser Gln Ala Gln Leu Gln Asn Asn 35 . . . 40 Leu Asn Val Gly Ser Asp Thr Thr Ser Glu Thr Ser Phe Ser Leu Ser 50 55 60 Lys Glu Ala Pro Arg Glu His Leu Asp His Gln Ala Ala His Gln Pro. 80 Phe Pro Arg Pro Arg Phe Arg Gln Glu Thr Gly His Pro Ser Leu Gln 85 Arg Asp Phe Pro Arg Ser Phe Leu Leu Asp Leu Pro Asn Phe Pro Asp . 100 ' 105 110 Leu Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr . 120 115 125 Ile Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His 135 130 140 Pro Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala 145 · 150 . 155 160 Trp Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln 165 170 175 Asp Tyr Gln Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro 180 . 185 . 190

<sup>.</sup> 1029

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Pro Arg Gly Trp Asp His Thr Xaa Pro Gly His Arg Asp Phe 195 200 205

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Phe	Pro	Ârg	Pro	Arg 85	Phe	Arg	Gln	Glu	Thr 90	Gly	His	Pro	Ser	Leu 95	Gln	
Arg	Asp	Phe	Pro 100	Arg	Ser	Phe	Leu	Leu 105	Asp	Leu	Pro	Asn	Phe 110	Pro	Asp	
Leu	Ser	Lys 115	Ála	Asp	Ile	Asn	Gly 120	Gln	Asn	Pro	Asn	Ile 125	Gln	Val	Thr	-
Ile	Glu 130	Val	Val	Asp	Gly	Pro 135	Asp	Ser	Glu	Ala	Asp 140	Lys	Asp	Gln	His	
 Pro 145	Glu	Asn	Lys	Pro	Ser 150	Trp	Ser	Val	Pro	Ser 155	Pro	Asp	Trp	Arg	Ala 160	
Trp	Trp	Gln	Arg	Ser 165	Leu	Ser	Leu	Ala	Arg 170	Ala	Asn	Ser	Gly	Asp 175	Gln	
Asp	Tyr	Lys ′.	Tyr 180	Asp	Ser	Thr	Ser	Asp 185	Asp	Ser	Asn	Phe	Leu 190	Asn	Pro	
Pro	Arg	Gly 195	Trp	Asp	His	Thr	Ala 200	Pro	Gly	His	Arg	Thr 205	Phe	Glu	Thr	
Lys	Asp 210	Gln	Pro	Glu	Tyr	Asp 215	Ser	Thr	Asp	Gly.	Glu 220	Ġly	Asp	Tŕp	Ser	
Leu 225	Trp	Ser	Val	Cys	Ser 230	Val	Thr	Cys	Gly	Asn 235	Gly	Asn	Gln	Lys	Arg 240	
Thr	Arg	Ser	Суз	Gly 245	Tyr	Ala	Cys	Thr	Ala 250	Thr	Glu	Ser	Arg	Thr 255	Cys	
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Leu	Phe 290	Glu	Val	Aşp	Thr	Asp 295	Ser	Cys	Glu	Arg ·	Trp 300	Met	Ser	Cys	Lys	
Ser 305	Glu	Phe	Leu	Lys	Lys 310	Tyr	Met	His	Lys	Val 315	Met	Asn	Asp	Leu	Pro 320	
Ser	Cys -	Pro	Cys	Şer 325	Tyr ,	Pro	Thr	Glu	Val 330	Ala	Tyr	Ser	Thr	Ala 335	Asp	
Ile	Phe	Asp	Arg 340	Ile	Lys	Arg	Lys	Asp 345	Phe	Arg	Trp	Lys	Asp 350	Ala	Ser	
Gly	Pro . '	Lys 355	Glu	Lys	Leu	Glu	Ile 360	Tyr	Lys	Pro	Thr	Ala 365	Arg	Tyr	Cys	
Ile	Arg 370	Ser	Met	Leu	Ser	Leu 375	Glu	Ser	Thr	Thr	Leu 380	Ala	Ala	Gln	His	
Cys 385	Cys	Tyr	Gly	Asp	Asn 390	Met	Gln	Leu	Ile	Thr 395	Arg	Gly	Lys	Gly	Ala 4.00	

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Gly Thr Pro Asn Leu Ile Ser Thr Glu Phe Ser Ala Glu Leu His Tyr 405 410 415 Lys Val Asp Val Leu Pro Trp Ile Ile Cys Lys Gly Asp Trp Ser Arg 420 425 430 Tyr Asn Glu Ala Arg Pro Pro Asn Asn Gly Gln Lys Cys Thr Glu Ser 440 435 445 Pro Ser Asp Glu Asp Tyr Ile Lys Gln Phe Gln Glu Ala Arg Glu Tyr 455 450 460 - . <210> 1653 <211> 158 <212> PRT <213> Homo sapiens <400> 1653 Met Thr Thr Met Ala Pro Val Gly Leu Gln Thr Arg Ile Pro Trp Leu 1 5 10 15 Leu Cys Leu Gly Pro Pro Pro Gly Pro Cys Cys Pro Leu Ser Pro Thr 20 25 30 Ser Thr Leu Pro His Thr Pro Thr Ala Arg Ser Leu His Pro Thr Met 35 . 40 45 . Ser Phe His Leu Thr Pro Met Val Gly Ala Val Pro Ala Ala Ser Ile 50 55 60 Val Arg Ala Ala Gly Ala Val Gly Arg His Gly Val Met Gly Gly Gln 70 75 65 80 Gly Ala Arg Gly Gly Pro Arg Ser Gly Pro Pro Ser Pro Ser Pro Ala 90 - 95 · Val Ala Val Ser Leu Ser Pro Pro Ala Glu Gly Ala Ala Phe Gly Gly 100 105 110 Val Gly Lys Gln Val Gly Leu Ala Met Gly Ala Leu Leu His Pro Glu 115 120 . 125 Ala Gln Leu Gly Val Pro Leu Ile Ser Glu Pro Thr Gln Gly Ser Ile 130 135 . 140 Pro Met Asp Arg Pro Leu Ala Trp Pro Ser Pro Thr Thr Pro 145 150 155 . <210> 1654 <211> 106 <212> PRT '

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135 130 140 Pro Met Asp Arg Pro Leu Ala Trp Pro Ser Pro Thr Thr Pro 145 150 155 <210> 1656 <211> 66 <212> PRT <213> Homo sapiens <400> 1656 Met His Arg Pro Glu Ala Met Leu Leu Leu Leu Thr Leu Ala Leu Leu - 15 1 \_ 5 10 Gly Gly Pro Thr Trp Ala Gly Lys Met Tyr Gly Pro Gly Gly Gly Lys 20 25 30 . Tyr Phe Ser Thr Thr Glu Asp Tyr Asp His Glu Ile Thr Gly Leu Arg 35 • 40 45 . . Val Ser Val Gly Leu Leu Leu Val Lys Arg Phe Leu Glu Gly Val Ile 50 . 55 60 Tyr Glu 65 <210> 1657 <211> 178 <212> PRT <213> Homo sapiens <400> 1657 · Met His Arg Pro Glu Ala Met Leu Leu Leu Leu Thr Leu Ala Leu Leu 5 1 10 . 15 . Gly Gly Pro Thr Trp Ala Gly Lys Met Tyr Gly Pro Gly Gly Gly Lys 20 25 30 Tyr Phe Ser Thr Thr Glu Asp Tyr Asp His Glu Ile Thr Gly Leu Arg 35 , . 40 45 Val Ser Val Gly Leu Leu Leu Val Lys Ser Val Gln Val Lys Leu Gly 55 50 60 . . Asp Ser Trp Asp Val Lys Leu Gly Ala Leu Gly Gly Asn Thr Gln Glu 65 70 75 80 · · Val Thr Leu Gln Pro Gly Glu Tyr Ile Thr Lys Val Phe Val Ala Phe 85 . 90 95 Gln Ala Phe Leu Arg Gly Met Val Met Tyr Thr Ser Lys Asp Arg Tyr . 100 105 110 Phe Tyr Phe Gly Lys Leu Asp Gly Gln Ile Ser Ser Ala Tyr Pro Ser 120 . 125 . 115

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                                                     PCT/US01/11988
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     130 135
  Gly Ile Lys Ser Ile Gly Phe Glu Trp Asn Tyr Pro Leu Glu Glu Pro
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                                    155
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  Leu Leu Pro Arg Val Glu Cys Ser Gly Ala Ile Ser Ala His Cys Asn
           20
                                    30 .
                          25
  Leu His Leu Pro Gly Ser Gly Gly Phe Ser Cys Leu Ser Leu Leu Ser ?
     35 .
                          40
                                 . 45
  Ser Trp Asp Xaa Arg His Ala Pro Pro Cys Pro Asp Asn Phe Cys Xaa
      50 55 60
  Phe Ser Xaa Xaa Gly Val Ser Leu Cys Trp Gln Ala Gly Leu Glu His
  65
                    70
                              75 80
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	Leu	Thr	Arg	Gly	Pro 85	Pro	Ala	Ser	Ala	Ser 90	Gln	Ser	Thr	Gly	Ile 95	Thr		
	Gly	Val	Ser	His 100	Pro	Ala	Trp	Pro	Arg 105	Met	Thr	Phe	r ,	Arg 110	Ser	Asn	.•	
								•		•			,				• .	
						•					•							
	<213 <213	0> 1 1> 1: 2> P: 3> He	22 RT	sapie														
				Jabri	-110			•										
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	Pro	Ala	His	Phe 20	Şer	Gln	Cys	Arg	Met 25	Thr	Phe	Cys	Leu	Phe 30	Val	Leu		
	Phe	Cys	Leu 35	Arg	Trp	Ser	Leu	Ala 40	Leu	Leu	Pro	Arg	Val 45	Glu	Cys	Ser		
	Gly	Ala 50	Ile	Ser	Ala	His	Cys 55	Asn	Leu	His	Leu	Pro 60	Gly	Ser	Ser	Gly		
	Phe 65	Ser	Cys	Leu	Ser	Leu 70		Ser	Ser	Trp	Asp 75	Tyr	Arg	His	Ala	Pro 80		
	Pro	Cys	Pro	Asp	Asn 85	Phe	Cys	Ile	Phe	Ser 90	Arg	Asp	Gly	Val	Ser ,95	Leu		
	Cys	Trp	Pro	Gly 100	Trp	Ser	Arg	Thr	Pro 105	Asp	Leu	Val	Val	His 110	Pro	Pro		
	Arg	Pro	Pro 115	Lys	Ala	Leu	Gly	Leu 120	Gln	Ala				•				
												·	•					
	<211 <212		5 RT	sapie	ens	•		-			·	•.			-		•	
	<220 <221	)> L> s:	ITE								. •							
••	<222	2> (2	24)	puals	s any	r of	the	natı	ırall	y oc	curi	ring	L-an	nino	ació	ls		
		)> 10 Cys		Gly	Leu 5	Lys	Asn	Pro	Glu	Gly 10	Leu	Leu	Leu	Leu	Leu 15	Leu		
	Leu	Leu	Leu	Phe 20	Thr	Asp	Thr	Xaa	Asn 25	Ser	His	Cys	Leu	Pro 30	Pro	Tyr		

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Leu Ser Cys Phe Leu His Glu Arg Gln Pro Glu Leu Gln Ser Val Cys 35 40 45 Ile Ser Ala Ala Tyr Val Leu Ala Pro Leu Gln Asn Pro Val Ser Ser 50 55 60 Leu 65 <210> 1661 <211> 299 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (172) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (174) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1661 Gly Gly Glu Glu Gly Glu Glu Gly Ala Glu Ile Ser Gly Leu Gly 1 5 10 15 Ala Gly Arg Arg Ser Ala Pro Ile Ala Val Gly Leu Gly Phe Leu Gly - 20 Val Gly Gly Arg Gly Gly Ser Asp Met Glu Ala Asn Gly Ser Gln Gly 35 40 45 Thr Ser Gly Ser Ala Asn Asp Ser Gln His Asp Pro Gly Lys Met Phe . 55 50 60 Ile Gly Gly Leu Ser Trp Gln Thr Ser Pro Asp Ser Leu Arg Asp Tyr 65 70 75 80 Phe Ser Lys Phe Gly Glu Ile Arg Glu Cy's Met Val Met Arg Asp Pro 85 · 90 · 95 Thr Thr Lys Arg Ser Arg Gly Phe Gly Phe Val Thr Phe Ala Asp Pro - 100 105 110 Ala Ser Val Asp Lys Val Leu Gly Gln Pro His His Glu Leu Asp Ser 115 120 . . . 125 . Lys Thr Ile Asp Pro Lys Val Ala Phe Pro Arg Arg Ala Gln Pro Lys 130 135 140Met Val Thr Arg Thr Lys Lys Ile Phe Val Gly Gly Leu Ser Ala Asn 145 150 • 155 160 Thr Val Val Glu Asp Val Lys Gln Tyr Phe Glu Xaa Phe Xaa Lys Val 165

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# WO 01/77137 PCT/US01/11988 Glu Asp Ala Met Leu Met Phe Asp Lys Thr Thr Asn Arg His Arg Gly 180 185 Phe Gly Phe Val Thr Phe Glu Asn Glu Asp Val Val Glu Lys Val Cys 195 200 205 Glu Ile His Phe His Glu Ile Asn Asn Lys Met Val Glu Cys Lys Lys 210 215 220 Ala Gln Pro Lys Glu Val Met Phe Pro Pro Gly Thr Arg Gly Arg Ala 225 230 235 240 Arg Gly Leu Pro Tyr Thr Met Asp Ala Phe Met Leu Gly Met Gly Met \_\_\_\_\_245 250 255 Leu Gly Glu Ser Gly Gln Asp Arg Arg Ser Pro Trp Thr Gly Arg Ala 260 265 270 260 Met Glu Ala Ser Thr Pro Asn Trp Val Thr Tyr Gln Trp Gly Lys Leu 275 280 285 Leu His Leu Ser Lys Pro Gln Phe Pro Cys Leu 290 295 . · -<210> 1662 <211> 97 <212> PRT <213> Homo sapiens <400> 1662 Met Cys Lys Gly Leu Lys Asn Pro Glu Gly Leu Leu Leu Leu Leu 1 5 . 10 15 • Leu Leu Phe Thr Asp Thr Ser Asn Ser His Cys Leu Pro Pro Tyr . 20 25 30 -Leu Ser Cys Phe Leu His Glu Arg Gln Pro Glu Leu Gln Ser Val Cys 35 40 45 Ile Ser Ala Ala Tyr Val Leu Ala Thr Pro Pro Glu Pro Ser Phe Ile 50 55 60 Leu Val Gly Phe Ser Glu Ala Gly Phe Ala Gln Val Ala Cys Phe Leu 65 70 . . 80 75 Lys Tyr Leu Phe Cys Arg Pro Phe Thr Arg His Gly Tyr Phe Tyr Ser 90 95 85 Gly

<210> 1663 <211> 86 <212> PRT <213> Homo sapiens

<220> <221> SITE <222> (71) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1663. Met Leu Ala Ala Ala Pro Leu His Glu Gln Lys Gln Met Ile Gly Thr 1 5 10 15 Cys Tyr Leu Val Leu Lys Arg Trp Ser Asp Trp Met Val Leu Ser Phe 20 . 25 30 Leu Pro Leu Leu Ser Cys Asp Phe Glu Gly Ser Val Ser Thr Pro 35 40 <u> </u> Leu Ser Met Met Ser Thr Pro Ser Trp Leu Ala Arg Ser Arg Ala Cys 50 . 55 60 Cys Trp Arg Leu Thr Thr Xaa Ser Cys Cys Ser Cys Trp Ser Leu Gln 65 70 75 -80 Asn Pro Ser Met Pro Arg 85 <210> 1664 <211> 86 <212> PRT <213> Homo sapiens <220> <221> SITE . <222> (71) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1664 Met Leu Ala Ala Ala Pro Leu His Glu Gln Lys Gln Met Ile Gly Thr . 1 . 5 10 . 15 Cys Tyr Leu Val Leu Lys Arg Trp Ser Asp Trp Met Val Leu Ser Phe · 20 25 30 . Leu Pro Leu Leu Ser Cys Asp Phe Glu Gly Ser Val Ser Thr Pro 35 . 40 45 Leu Ser Met Met Ser Thr Pro Ser Trp Leu Ala Arg Ser Arg Ala Cys 50 55 60 Cys Trp Arg Leu Thr Thr Xaa Ser Cys Cys Ser Cys Trp Ser Leu Gln 65 70 75 80 . Asn Pro Ser Met Pro Arg ۰. -85

<210> 1665
<211> 49
<212> PRT

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<213> Homo sapiens <400> 1665 Met Lys His Ser Phe Leu Ser Ser Asp Leu Ile Trp Cys Val Leu Ser 1 5 10 15 Leu Leu Cys Leu Gly Val Trp Phe Arg Glu Thr Trp Thr Thr Leu Phe 20 25 30 Gly Arg Thr Gly Leu Pro Arg Asn Gln Gln Cys Pro Arg Arg Lys Gly 35 40 · 45 Leu <210> 1666 <211> 49 <212> PRT <213> Homo sapiens <400> 1666 Met Lys His Ser Phe Leu Ser Ser Asp Leu Ile Trp Cys Val Leu Ser 1 5 10 15 Leu Leu Cys Leu Gly Val Trp Phe Arg Glu Thr Trp Thr Thr Leu Phe 20 25 30 Gly Arg Thr Gly Leu Pro Arg Asn Gln Gln Cys Pro Arg Arg Lys Gly 35 40 45 ۰. Leu <210> 1667 <211> 142 <212> PRT <213> Homo sapiens `<220> <221> SITE <222> (69) <223> Xaa equals any of the naturally occurring L-amino acids <220> • • <221> SITE <222> (76) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (90) <223> Xaa equals any of the naturally occurring L-amino acids . <220> <221> SITE . <222> (108)

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<223> Xaa equals any of the naturally occurring L-amino acids <400> 1667 Met Tyr Val Thr Leu Val Phe Arg Val Lys Gly Ser Arg Leu Val Lys 1 5 10 . 15 Pro Ser Leu Cys Leu Ala Leu Leu Cys Pro Ala Phe Leu Val Gly Val · · · 20 25 30 Val Arg Val Ala Glu Tyr Arg Asn His Trp Ser Asp Val Leu Ala Gly 35 . 40 45 Phe Leu Thr Gly Ala Ala Ile Ala Thr Phe Leu Val Thr Cys Val Val 50 55 . 60 . His Asn Phe Gln Xaa Arg Pro Pro Ser Gly Arg Xaa Leu Ser Pro Gln . 70 65 75 80 Ser Ala Tyr Pro Arg Leu Pro Gly Pro Xaa Phe Pro His Leu His Asn 85 90 95 Gly Gly Asp His Pro Cys Pro Ala Gly Cys Arg Xaa Gly Cys Glu Ser 100 105 110 Ser Ala Trp Met Gln Pro Gly Gly Ser His Arg Ala Ala Phe Thr Gly 115 , 120 125 Leu Ala Leu Pro Trp Ala Gly Gly Arg Pro His Pro Lys Arg 130 135 140 . · <210> 1668 <211> 110 <212> PRT <213> Homo sapiens <400> 1668 Met Tyr Val Thr Leu Val Phe Arg Val Lys Gly Ser Arg Leu Val Lys 1 5 . 10 15 Pro Ser Leu Cys Leu Ala Leu Leu Cys Pro Ala Phe Leu Val Gly Val 20 . 25 30 Val Arg Val Ala Glu Tyr Arg Asn His Trp Ser Asp Val Leu Ala Gly 35 40 45 Phe Leu Thr Gly Ala Ala Ile Ala Thr Phe Leu Val Thr Cys Val Val 50 55 . 60 His Asn Phe Gln Ser Arg Pro Pro Ser Gly Arg Arg Leu Ser Pro Gln 65 . 70 75 . -80 Ser Ala Tyr Pro Arg Leu Pro Gly Pro Gln Phe Pro His Leu His Asn 85 . 90 Gly Gly Asp His Pro Cys Pro Ala Gly Cys Gln Glu Arg Leu 100 · . 105 . 110

<210> 1669 <211> 159 <212> PRT <213> Homo sapiens <400> 1669 Met Ala Gly Pro Gly Trp Thr Leu Leu Leu Leu Leu Leu Leu Leu Leu 1 5 10 15 Leu Leu Gly Ser Met Ala Gly Tyr Gly Pro Gln Lys Lys Leu Asn Leu 20 25 30 . Ser His Lys Gly Ile Gly Glu Pro Cys Gly Arg His Glu Glu Cys Gln . 35 40 45 Ser Asn Cys Cys Thr Ile Asn Ser Leu Ala Pro His Thr Leu Cys Thr 50 55 60 Pro Lys Thr Ile Phe Leu Gln Cys Leu Pro Trp Arg Lys Pro Asn Gly 65 70 75 80 Tyr Arg Cys Ser His Asp Ser Glu Cys Gln Ser Ser Cys Val Arg - 85 -90 95 Asn Asn Ser Pro Gln Glu Leu Cys Thr Pro Gln Ser Val Phe Leu Gln 100 105 110 Cys Val Pro Trp Arg Lys Pro Asn Gly Asp Phe Cys Ser Ser His Gln 115 . 120 125 Glu Cys His Ser Gln Cys Cys Ile Gln Leu Arg Glu Tyr Ser Pro Phe -130 135 140 Arg Cys Ile Pro Arg Thr Gly Ile Leu Ala Gln Cys Leu Pro Leu 145 150 155 . -. <210> 1670 <211> 110 <212> PRT <213> Homo sapiens <400> 1670 Met Arg Trp Pro Cys Pro Thr Ser Lys Pro Ala Pro Pro Pro Val Leu 1 5 10 15 Trp Ser His Leu Cys Gln His Arg Trp Gly Leu Thr Pro Ala Ser Thr 20 25 30 Leu Leu Cys Trp Leu Leu Leu Phe Asn Leu Gly Thr Cys Leu Ser Phe 35 40 45 Ser His Leu Lys Gln Asn Asn Asn Asn Ser Asn Thr Ser Lys Ile Ser 50 55 60 Phe Asp Pro Ala Ser Leu Cys Trp Val Ile Ile Ser Leu Ser Phe Pro 65 70 75 . 80

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Pro Phe Pro Ser Lys His Leu Lys Arg Val Val Tyr Thr Gln His Ser 85 90 -95 Pro Phe Pro His Tyr Pro Leu Thr Pro Gln Pro Ala Ala Ile 100 105 110 <210> 1671 <211> 382 <212> PRT <213> Homo sapiens <400> 1671 Gly Pro Glu Arg Gly Arg Tyr Tyr Pro Lys Ser His Lys Asn Val Asp 1 10 15 Leu Asn Asp Val Leu Val Pro Lys Pro Phe Ser Gln Phe Trp Gln Pro 20 . . 25 30 . Leu Leu Arg Gly Leu His Ser Gln Asn Phe Thr Gln Ala Leu Leu Glu 35 40 45 Arg Met Leu Ser Glu Leu Pro Ala Leu Gly Ile Ser Gly Ile Arg Pro 50 55 бО. Thr Tyr Ile Leu Arg Trp Thr Val Glu Leu Ile Val Ala Asn Thr Lys 65 <sup>-</sup> , 70 75 80 Thr Gly Arg Asn Ala Arg Arg Phe Ser Ala Gly Gln Trp Glu Ala Arg 85 90 . 95 Arg Gly Trp Arg Leu Phe Asn Cys Ser Ala Ser Leu Asp Trp Pro Arg ·100 105 110 Met Val Glu Ser Cys Leu Gly Ser Pro Cys Trp Ala Ser Pro Gln Leu 115 120 125 Leu Arg Ile Ile Phe Lys Ala Met Gly Gln Gly Leu Pro Asp Glu Glu 130 . 135 140 Gln Glu Lys Leu Leu Arg Ile Cys Ser Ile Tyr Thr Gln Ser Gly Glu . 155 145 150 160 Asn Ser Leu Val Gln Glu Gly Ser Glu Ala Ser Pro Ile Gly Lys Ser 165 170 175 Pro Tyr Thr Leu Asp Ser Leu Tyr Trp Ser Val Lys Pro Ala Ser Ser 185 180 ·190 Ser Phe Gly Ser Glu Ala Lys Ala Gln Gln Gln Glu Glu Gln Gly Ser 195 · 200 205 Val Asn Asp Val Lys Glu Glu Glu Lys Glu Glu Lys Glu Val Leu Pro 210. 215 220 Asp Gln Val Glu Glu Glu Glu Glu Asn Asp Asp Gln Glu Glu Glu Glu 225 . 230 235 240 . . Glu Asp Glu Asp Asp Glu Asp Asp Glu Glu Glu Asp Arg Met Glu Val

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	245		250		255
Gly Pro Phe Se 26			Ser Pro Thr A 265	Ala Glu Asn 270	Ala Arg
Leu Leu Ala Gl 275 <sup>-</sup>	n Lys Arg	Gly Ala L 280	eu Gln Gly S	Ser Ala Trp 285	Gln Val
Ser Ser Glu As 290	p Val Arg	Trp Asp T 295		Seu Gly Arg	Met Pro
Gly Gln Thr Gl 305	u Asp Pro 310	Ala Glu L	eu Met Leu G 315	Slu Asn Tyr	Asp Thr 320
Met Tyr Leu Le	u Asp Gln 325	Pro Val L	eu Glu Gln A 330		Pro Ser . 335
Thr Cys Lys Th 34			eu Ser Cys G 45	Sly Val Gly 350	Ser Gly
Asn Cys Ser As 355	n Ser Ser	Ser Ser A 360 .	sn Phe Glu G	ly Leu Leu 365	Trp Ser .
Gln Gly Gln Le 370	u His Gly	Leu Lys T 375	•	ln Leu Phe 80	,
<210> 1672 <211> 110 <212> PRT <213> Homo sap	iens				· · · ·
<400> 1672 Met Arg Trp Pr 1	o Cys Pro S	Thr Ser L	ys Pro Ala P . 10	Pro Pro Pro	Val Leu 15
Trp Ser His Le 2			rp Gly Leu T 25	hr Pro Ala 30	
Leu Leu Cys Tr 35	p Leu Leu	Leu Phe A 40	sn Leu Gly T	hr Cys Leu 45	Ser Phe
Ser His Leu Ly 50	s Gln Asn	Asn Asn A 55		hr Ser Lys 60	Ile Ser
Phe Asp Pro Al 65	a Ser Leu 70	Cys Trp V	al Ile Ile S 75	er Leu Ser	Phe Pro 80
Pro Phe Pro Se	r Lys His 85	Leu Lys À	rg'Val Val T 90	'yr Thr Gln	His Ser 95
Pro Phe Pro Hi 10			ro Gln Pro A 05	la Ala Ile 110	
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<210> 1673 <211> 156 <212> PRT	•				• .

<211> 156
<212> PRT

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<213> Homo sapiens <220> <221> SITE <222> (92) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (114) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (122) . <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (134) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1673 Met Leu Gln Gly His Ser Ser Val Phe Gln Ala Leu Leu Gly Thr Phe 1 5 10 15 Phe Thr Trp Gly Met Thr Ala Ala Gly Ala Ala Leu Val Phe Val Phe 20 \_ 25 30 Ser Ser Gly Gln Arg Arg Ile Leu Asp Gly Ser Leu Gly Phe Ala Ala 35 40 45 Gly Val Met Leu Ala Ala Ser Tyr Trp Ser Leu Leu Ala Pro Ala Val 50 · 55 60 Glu Met Ala Thr Ser Ser Gly Gly Phe Gly Ala Phe Ala Phe Phe Pro 65 70 75 . 80 Val Ala Val Gly Phe Thr Leu Gly Ala Ala Phe Xaa Tyr Leu Ala Asp 85 90 95 Leu Leu Met Pro His Leu Gly Ala Ala Glu Asp Pro Gln Thr Ala Leu 100 105 110 Ala Xaa Asn Phe Gly Ser Thr Leu Met Xaa Lys Lys Ser Asp Pro Glu 115 . 120 125 Gly Pro Ala Leu Leu Xaa Pro Glu Ser Glu Leu Phe Ile Arg Ile Gly 130 · 135 140 Arg Leu Ala Ser Phe Ser Ser Ser Leu Leu Gln His 145 150 155 <210> 1674

<210> 1674 <211> 167 <212> PRT <213> Homo sapiens

<220> <221> SITE <222> (140) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1674 Met Leu Gln Gly His Ser Ser Val Phe Gln Ala Leu Leu Gly Thr Phe 1 5 10 . 15 Phe Thr Trp Gly Met Thr Ala Ala Gly Ala Ala Leu Val Phe Val Phe 20 25 30 Ser Ser Gly Gln Arg Arg Ile Leu Asp Gly Ser Leu Gly Phe Ala Ala 35 40 Gly Val Met Leu Ala Ala Ser Tyr Trp Ser Leu Leu Ala Pro Ala Val 50 55 60 Glu Met Ala Thr Ser Ser Gly Gly Phe Gly Ala Phe Ala Phe Phe Pro 65 70 75 80 Val Ala Val Gly Phe Thr Leu Gly Ala Ala Phe Val Tyr Leu Ala Asp 85 90 . 95 . Leu Leu Met Pro His Leu Gly Ala Ala Glu Asp Pro Gln Thr Ala Leu 100 105 110 Ala Leu Asn Phe Gly Ser Thr Leu Met Lys Lys Lys Ser Asp Pro Glu . 115 120 . 125 Gly His Ala Leu Leu Phe Pro Glu Arg Ile His Xaa Ile Asp Lys Ser 130 135 140 Glu Asn Gly Glu Ala Tyr Gln Arg Lys Lys Ala Ala Ala Thr Gly Leu 145 150 155 1.60 Pro Glu Gly Pro Ala Val Pro 165 <210> 1675 <211> 204 <212> PRT <213> Homo sapiens <400> 1675 Met Phe Gln Phe Leu Ser Gln Gly Phe Tyr Cys Gly Val Gly Leu Phe 1 • 5 10 15 Thr Arg Phe Leu Lys Leu Leu Gly Ala Leu Leu Leu Ala Leu Ala 20 25 30 · Leu Phe Leu Gly Phe Leu Gln Leu Gly Trp Arg Phe Leu Val Gly Leu 35 40 45 Gly Asp Arg Leu Gly Trp Arg Asp Lys Ala. Thr Trp Leu Phe Ser Trp 50 55 . 60 Leu Asp Ser Pro Ala Leu Gln Arg Cys Leu Thr Leu Leu Arg Asp Ser

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	65					70					75					80		
P	arg	Pro	Trp	Gln	Arg 85	Leu	Val	Arg	Ile	Val 90	Gln	Trp	Gly	Trp	Leu 95			
I	Jeu	Pro	Trp	Val 100		Gln	Asn	Ile			Gln	Gly	Asn					•
P	la	Ser			Tyr	Cys	Gln		105 Glu	Glu	Glu	Val		110 Arg	Leu	Leu		
Ţ	'hr		115 Ala	Gly	Val	Pro	_	120 Asp	Glu	Leu	Asn		125 Phe	His	Val	Leu		
		130 Val	Glu	Ala	Thr	Ala	135 Ser	Asp	Val	Glu		140 Lys	Lys	Ala	Tyr			
	.45 Sln	Leu	Ala	Val	Met	150 Val	His	Pro	Asp	Lvs	155 Asn	His	His	Pro	Arg	160 Ala		
	•			-	165				-	170					175			
Ģ	lu	Glu	Ala	Phe 1,80	Lys	Val	Phe	Ala	Ser 185	Ser	Leu	Gly	Thr	Leu 190	Ser	Ala		• .
M	let	Leu	Lys 195	Lys	Arg	Lys	Gly	Val 200	Trp	Arg	Leu	Lys						
				•											•			
<	211 212	)> 16 .> 41 ?> PF ?> Ho	12 RT	sapie	ens									•				
<	:400	)> 16	576		·													
M	iet 1	Gly	Val	Trp	Thr 5	Gly	Arg	Leu	Gly	Gly 10	Trp	Ala	Gln	Val	Met 15	Phe	•••	•
Ċ	ln	Phe	Leu	Ser 20	Gln	Gly	Phe	Tyr	Cys 25	Gly	Val	Gly	Leu	Phe 30	Thr	Arg		
E	he	Leu	Lys 35	Leu	Leu	Gly	Ala	Leu 40	Leu	Leu	Leu	Ala	Leu 45	Ala	Leu	Phe		
I	eu	Gly 50	Phe	Leu	Gln	Leu	Gly 55	Trp	Arg	Phe	Leu	Val 60	Gly	Leu	Gly	Asp		
A	rg 65	Leu	Gly	Trp	Arg	Asp 70	Lys	Ala	Thr ,	Tŗp	Leu 75	Phe	Ser	Trp	Leu	Asp 80		
	Ser	Pro	Ala	Leu	Gln 85	Arg:	Суз	Leu	Thr ·	Lėu 90	Leu	Arg	Asp	Ser	Arg 95	Pro		
I	ŗp	Gln	Arg	Leu 100	Val	Arg	Ile	Val	Gln 105	Trp	Gly	Trp	Leu	Glu 110	Leu	Pro		:
י. ניי	rp	Val	Lys 115	Gln	Asn	Ile	Asn	Arg 120	Gln	Gly	Asn	Ala	Pro 125	Val	Ala	Ser		
Ģ	ly	Arg 130	Tyr	Cys	Gln	Pro	Glu 135	Glu	Glu	Val	Ala		Leu	Leu	Thr	Met		
		100										140						•

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Ala Gly Val Pro Glu Asp Glu Leu Asn Pro Phe His Val Leu Gly Val 145 150 155 160 Glu Ala Thr Ala Ser Asp Val Glu Leu Lys Lys Ala Tyr Arg Gln Leu 165 170 . • 175 Ala Val Met Val His Pro Asp Lys Asn His His Pro Arg Ala Glu Glu 180 185 190 Ala Phe Lys Val Leu Arg Ala Ala Trp Asp Ile Val Ser Asn Ala Glu 195 200 205 Lys Arg Lys Glu Tyr Glu Met Lys Arg Met Ala Glu Asn Glu Leu Ser . 215 210 220 Arg Ser Val Asn Glu Phe Leu Ser Lys Leu Gln Asp Asp Leu Lys Glu 225 230 235 240 Ala Met Asn Thr Met Met Cys Ser Arg Cys Gln Gly Lys His Arg Arg 245 250 , 255 Phe Glu Met Asp Arg Glu Pro Lys Ser Ala Arg Tyr Cys Ala Glu Cys 260 265 270 Asn Arg Leu His Pro Ala Glu Glu Gly Asp Phe Trp Ala Glu Ser Ser . 275 280 285 Met Leu Gly Leu Lys Ile Thr Tyr Phe Ala Leu Met Asp Gly Lys Val 290 295 300 Tyr Asp Ile Thr Gln Trp Ala Gly Cys Gln Arg Val Gly Ile Ser Pro 305 310 315 320 Asp Thr His Arg Val Pro Tyr His Ile Ser Phe Gly Ser Arg Ile Pro 325 330 . 335 Gly Thr Arg Gly Arg Gln Arg Ala Thr Pro Asp. Ala Pro Pro Ala Asp 340 . 345 350 Leu Gln Asp Phe Leu Ser Arg Ile Phe Gln Val Pro Pro Gly Gln Met 355 360 365 Pro Asn Gly Asn Phe Phe Ala Ala Pro Gln Pro Ala Pro Gly Ala Ala 370 375 380 Ala Ala Ser Lys Pro Asn Ser Thr Val Pro Lys Gly Glu Ala Lys Pro 385 390 . 395 400 Lys Arg Arg Lys Lys Val Arg Arg Pro Phe Gln Arg 405 410 .

<210> 1677
<211> 122
<212> PRT
<213> Homo sapiens

<220> .

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<221> SITE <222> (119) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1677 Met Ala Leu Phe Arg Cys Val Trp Ser Val Leu Ser Ala Leu Gly Lys 1 10 15 Ser Gly Ser Asp Leu Cys Ala Gly Cys Gly Ser Arg Leu Arg Ser Pro 20 25 30 Phe Ser Phe Ala Tyr Val Pro Arg Cys Phe Ser Ser Thr Ala Asn Ser . 40 35 45 . Tyr Pro Lys Lys Pro Leu Thr Ser Tyr Val Arg Phe Ser Lys Glu Gln 50 55 60 Leu Pro Ile Phe Lys Ala Gln Asn Pro Asp Ala Lys Asn Ser Glu Leu 65 70 75 80 Ile Arg Lys Ile Ala Gln Leu Trp Arg Glu Leu Pro Asp Ser Glu Lys 85 90 95 Lys Ile Tyr Glu Asp Ala Tyr Arg Ala Asp Leu Ala Gly His Thr Lys 105 100 . 110 · Lys Glu Ile Asn Arg Ile Xaa Glu Pro Gly 115 120 <210> 1678 <211> 246 <212> PRT <213> Homo sapiens <400> 1678 Met Ala Leu Phe Arg Cys Val Trp Ser Val Leu Ser Ala Leu Gly Lys 1 10 15 Ser Gly Ser Asp Leu Cys Ala Gly Cys Gly Ser Arg Leu Arg Ser Pro 20 ·25 30 Phe Ser Phe Ala Tyr Val Pro Arg Cys Phe Ser Ser Thr Ala Asn Ser 35 40 45 Tyr Pro Lys Lys Pro Leu Thr Ser Tyr Val Arg Phe Ser Lys Glu Gln 5055 60 Leu Pro Ile Phe Lys Ala Gln Asn Pro Asp Ala Lys Asn Ser Glu Leu 65 70 • 75 80 Ile Arg Lys Ile Ala Gln Leu Trp Arg Glu Leu Pro Asp Ser Glu Lys 85 90 95 Lys Ile Tyr Glu Asp Ala Tyr Arg Ala Asp Trp Gln Ala Tyr Lys Glu 100 105 110 Glu Ile Asn Arg Ile Gln Glu Gln Leu Thr Pro Ser Gln Ile Val Ser 115 . . 120 125

Leu Glu Lys Glu Ile Gln Gln Lys Arg Leu Lys Lys Lys Ala Leu Ile 140 130 135 Lys Lys Arg Glu Leu Thr Met Leu Gly Lys Pro Lys Arg Pro Arg Ser 145 150 . 155 160 Ala Tyr Asn Ile Phe Ile Ala Glu Arg Phe Gln Glu Thr Lys Asp Gly 165 170 175 Thr Ser Gln Val Lys Leu Lys Thr Ile Asn Glu Asn Trp Lys Asn Leu 180 185 190 . Ser Ser Ser Gln Lys Gln Val Tyr Ile Gln Leu Ala Asn Asp Asp Lys 195 200 205 Ile Arg Tyr Tyr Asn Glu Met Lys Ser Trp Glu Glu Gln Met Met Glu 210 215 220 .Val Gly Arg Lys Asp Leu Leu Arg Arg Thr Val Lys His Gln Arg Lys 225 230 235 240 Val Asp Pro Glu Glu Tyr 245 <210> 1679 <211> 495 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (330) <223> Xaa equals any of the naturally occurring L-amino acids ~ <220> • . • <221> SITE <222> (333) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1679 . Met Ser Met Leu Val Val Phe Leu Leu Leu Trp Gly Val Thr Trp Gly 1 . 5 10 15 Pro Val Thr Glu Ala Ala Ile Phe Tyr Glu Thr Gln Pro Ser Leu Trp 20 25 30 Ala Glu Ser Glu Ser Leu Leu Lys Pro Leu Ala Asn Val Thr Leu Thr 35 . 40 45 Cys Gln Ala Arg Leu Glu Thr Pro Asp Phe Gln Leu Phe Lys Asn Gly 50 55 • 60<sup>.</sup> Val Ala Gln Glu Pro Val His Leu Asp Ser Pro Ala Ile Lys His Gln 65 70 . 75 80 Phe Leu Leu Thr Gly Asp Thr Gln Gly Arg Tyr Arg Cys Arg Ser Gly 85 90 95

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Leu	Ser	Thr	Gly 100	Trp	Thr	Gln	Leu	Ser 105	Lys	Leu	Leu	Glu	Leu 110	Thr	Gly
Pro	Lys	Ser 115	Leu	Pro	Ala	Pro	Trp 120	Leu	Ser	Met	Ala	Pro 125	Val	Ser	Trp
Ile	Thr 130	Pro	Gly	Leu	Lys	Thr 135	Thr	Ala	Val	Cys	Arg 140	Gly	Val	Leu	Arg
Gly 145	Val	Thr	Phe	Leu	Leu 150	Arg	Arg	Glu	Gly	Asp 155	His	Glu	Phe	Leu	Glu 160
Val	Pro	Glu	Ala	Gln 165		Asp	Val	Glu	Ala 170	Thr	Phe	Pro	Val	His 175	Gln
Pro	Gly	Asn	Tyr 180	Ser	Cys	Ser	Tyr	Arg 185	Thr	Asp	Gly	Glu	Gly 190	Ala	Leu
Ser	Glu	Pro 195	Ser	Ala	Thr	Val	Thr 200	Ile	Glu	Glu	Leu	Ala 205	Ala	Pro	Pro
Pro	Pro 210	Val	Leu	Met	His	His 215	Gly	Glu	Ser	Ser	Gln 220	Val	Leu	His	Pro
Gly 225	Asn	Lys	Val	Thr	Leu 230	Thr	Cys	Val	Ala	Pro 235	Leu	Ser	Gly	Val	Asp 240
Phe	Gln	Leu	Arg	Arg 245	Gly	Glu	Lys	Glu	Leu 250		Val	Pro	Ąrg	Ser 255	Ser
Thr	Ser	Pro	Asp 260	Arg	Ile	Phe	Phe	His 265	Leu	Asn	Ala	Val	Ala 270	Leu	Gly
Asp	Gly	Gly 275	His	Tyr	Thr	Cys	Arg 280	Tyr	Arg	Leu	His	Asp 285	Asn	Gln	Asn
	290				205 <sup>1</sup>	295	Pro				300			-	
Thr 305	Leu	Pro	Ala	Pro	Glu 310	Phe	Ser	Pro	Glu	Pro 315	Glu	Ser	Gly	Arg	Ala 320
				325			Pro		330					335	
			.340			·	Arg	345		,			350		
•		355				•.	Glu 360					365			
	370					375	Tyr				380		•		
385	Ser	Ala	Pro	Ser	Glu 390		Leu			395	Val	Asp		Pro	Pro 400
Pro															

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Arg Asp Ala Val Leu Arg Cys Glu Gly Pro Ile Pro Asp Val Thr Phe 420 425 430 Glu Leu Leu Arg Glu Gly Glu Thr Lys Ala Val Lys Thr Val Arg Thr 435 440 445 Pro Gly Ala Ala Asn Leu Glu Leu Ile Phe Val Gly Pro Gln His 450 455 460 Ala Gly Asn Tyr Arg Cys Arg Tyr Arg Ser Trp Val Pro His Thr Phe 465 470 475 480 Glu Ser Glu Leu Ser Asp Pro Val Glu Leu Leu Val Ala Glu Ser · 485 490 495 <210> 1680 <211> 495 <212> PRT <213> Homo sapiens <400> 1680 Met Ser Met Leu Val Val Phe Leu Leu Leu Trp Gly Val Thr Trp Gly 1 5 10 15 Pro Val Thr Glu Ala Ala Ile Phe Tyr Glu Thr Gln Pro Ser Leu Trp 20 25 30 Ala Glu Ser Glu Ser Leu Leu Lys Pro Leu Ala Asn Val Thr Leu Thr 35 40 45 Cys Gln Ala Arg Leu Glu Thr Pro Asp Phe Gln Leu Phe Lys Asn Gly 50 55 . 60 Val Ala Gln Glu Pro Val His Leu Asp Ser Pro Ala Ile Lys His Gln 65 70 75 80 Phe Leu Leu Thr Gly Asp Thr Gln Gly Arg Tyr Arg Cys Arg Ser Gly 85 90 . Leu Ser Thr Gly Trp Thr Gln Leu Ser Lys Leu Leu Glu Leu Thr Gly 100 105 110 Pro Lys Ser Leu Pro Ala Pro Trp Leu Ser Met Ala Pro Val Ser Trp 115 120 . 125 Ile Thr Pro Gly Leu Lys Thr Thr Ala Val Cys Arg Gly Val Leu Arg 130 135 . 140 Gly Val Thr Phe Leu Leu Arg Arg Glu Gly Asp His Glu Phe Leu Glu 145 150 155 160 Val Pro Glu Gly Gln Glu Asp Val Glu Ala Thr Phe Pro Val His Gln 165 170 175 Pro Gly Asn Tyr Ser Cys Ser Tyr Arg Thr Asp Gly Glu Gly Ala Leu 180 185 190 . .

Ser Glu Pro Ser Ala Thr Val Thr Ile Glu Glu Leu Ala Ala Pro Pro 195 • 200 205 Pro Pro Val Leu Met His His Gly Glu Ser Ser Gln Val Leu His Pro 210 215 220 Gly Asn Lys Val Thr Leu Thr Cys Val Ala Pro Leu Ser Gly Val Asp 225 230 235 240 Phe Gln Leu Arg Arg Gly Glu Lys Glu Leu Leu Val Pro Arg Ser Ser 245 250 . 255 Thr Ser Pro Asp Arg Ile Phe Phe His Leu Asn Ala Val Ala Leu Gly 260 265 . 270 . Asp Gly Gly His Tyr Thr Cys Arg Tyr Arg Leu His Asp Asn Gln Asn 275 280 285 Gly Trp Ser Gly Asp Ser Ala Pro Val Glu Leu Ile Leu Ser Asp Glu 295 . 300 Thr Leu Pro Ala Pro Glu Phe Ser Pro Glu Pro Glu Ser Gly Arg Ala 305 . 310 315 320 Leu Arg Leu Arg Cys Leu Ala Pro Leu Glu Gly Ala Arg Phe Ala Leù 325 . 330 335 Val Arg Glu Asp Arg Gly Gly Arg Arg Val His Arg Phe Gln Ser Pro 340 345 350 . Ala Gly Thr Glu Ala Leu Phe Glu Leu His Asn Ile Ser Val Ala Asp 355 360 365 Ser Ala Asn Tyr Ser Cys Val Tyr Val Asp Leu Lys Pro Pro Phe Gly 370 375 380 Gly Ser Ala Pro Ser Glu Arg Leu Glu Leu His Val Asp Gly Pro Pro 385 390 . 395 400 Pro Arg Pro Gln Leu Arg Ala Thr Trp Ser Gly Ala Val Leu Ala Gly 405 410 415 Arg Asp Ala Val Leu Arg Cys Glu Gly Pro Ile Pro Asp Val Thr Phe 420 425 430 Glu Leu Leu Arg Glu Gly Glu Thr Lys Ala Val Lys Thr Val Arg Thr 435 440 . 445 Pro Gly Ala Ala Asn Leu Glu Leu Ile Phe Val Gly Pro Gin His 450 455 460 Ala Gly Asn Tyr Arg Cys Arg Tyr Arg Ser Trp Val Pro His Thr Phe 465 470 475 480 Glu Ser Glu Leu Ser Asp Pro Val Glu Leu Leu Val Ala Glu Ser 495 · 485 490

<210> 1681

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<211> 153 <212> PRT <213> Homo sapiens <400> 1681 Met Leu Lys Asp Phe Ser Asn Leu Leu Leu Val Val Leu Cys Asp Tyr 1 5 10 15 Val Leu Gly Glu Ala Glu Tyr Leu Leu Leu Arg Glu Pro Gly His Val 20 25 30 Ala Leu Ser Asn Asp Thr Val Tyr Val Asp Phe Gln Tyr Phe Asp Gly 35 40 45 Ala Asn Gly Thr Leu Arg Asn Val Ser Val Leu Leu Leu Glu Ala Asn 50 55 60 Thr Asn Gln Thr Val Thr Thr Lys Tyr Leu Leu Thr Asn Gln Ser Gln 65 70 75 80 Gly Thr Leu Lys Phe Glu Cys Phe Tyr Phe Lys Glu Ala Gly Asp Tyr 85 . . 90 95 Trp Phe Thr Met Thr Pro Glu Ala Thr Asp Asn Ser Thr Pro Phe Pro 100 105 · 110 · Trp Trp Glu Lys Ser Ala Phe Leu Lys Val Glu Trp Pro Val Phe His 115 120 125 Val Asp Leu Asn Arg Ser Ala Lys Ala Ala Glu Gly Thr Phe Gln Val 130 135 140 Gly Leu Phe Thr Ser Gln Pro Leu Cys 145 · 150 <210> 1682 <211> 78 <212> PRT <213> Homo sapiens . <400> 1682 Ser Ser Pro Thr Ser Pro Lys Asp Asn Tyr Gln Arg Val Ser Ser Leu 1 5 . 10 15 Ser Pro Ser Gln Cys Arg Lys Asp Lys Cys Gln Ser Phe Pro Thr His 20 25 30 Pro Glu Phe Ala Phe Tyr Asp Asn Thr Ser Phe Gly Leu Thr Glu Ala 35 . 40 45 Glu Gln Arg Met Leu Asp Leu Pro Gly Tyr Phe Gly Ser Asn Glu Glu 50 55 60 Asp Glu Thr Thr Ser Thr Leu Ser Val Glu Lys Leu Val Ile 65 70 75

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<210> 1683 <211> 490 <212> PRT <213> Homo sapiens <400> 1683 Met Gly Lys Asn Lys Tyr Cys Phe Asp Phe Gly Ile Ser Ser Arg Ser 15 1 5 10 His Phe Ser Ala Lys Glu Glu Cys Met Leu Ile Gln Arg Asn Thr Ala 20 25 30 Phe Gln Pro Ser Ser Pro Ser Pro Leu Gln Pro Gln Gly Pro Val Lys 35 40 45 Ser Asn Asn Ile Val Thr Val Thr Gly Ile Ser Leu Cys Leu Phe Ile 50 55 60 Ile Ile Ala Thr Val Leu Ile Thr Leu Trp Arg Arg Phe Gly Arg Pro-65 70 75 . 80 Ala Lys Cys Ser Thr Pro Ala Arg His Asn Ser Ile His Ser Pro Ser · 85 90 95 Phe Arg Lys Asn Ser Asp Glu Glu Asn Ile Cys Glu Leu Ser Glu Gln 100 105 110 Arg Gly Ser Phe Ser Asp Gly Gly Asp Gly Pro Thr Gly Ser Pro Gly 115 120 125 Asp Thr Gly Ile Pro Leu Thr Tyr Arg Arg Ser Gly Pro Val Pro Pro 135 140 130 Glu Asp Asp Ala Ser Gly Ser Glu Ser Phe Gln Ser Asn Ala Gln Lys 150 145 155 160 Ile Ile Pro Pro Leu Phe Ser Tyr Arg Leu Ala Gln Gln Gln Leu Lys 165 170 . 175 Glu Met Lys Lys Lys Gly Leu Thr Glu Thr Thr Lys Val Tyr His Val 180 185 190 Ser Gln Ser Pro Leu Thr Asp Thr Ala Ile Asp Ala Ala Pro Ser Ala 195 . 200 205 . Pro Leu Asp Leu Glu Ser Pro Glu Glu Ala Ala Ala Asn Lys Phe Arg 210 215 . 220 Ile Lys Ser Pro Phe Pro Glu Gln Pro Ala Val Ser Ala Gly Glu Arg 225 230 235 240 Pro Pro Ser Arg Leu Asp Leu Asn Val Thr Gln Ala Ser Cys Ala Ile 245 250 255 Ser Pro Ser Gln Thr Leu Ile Arg Lys Ser Gln Ala Arg His Val Gly 265 260 270 Ser Arg Gly GIy Pro Ser Glu Arg Ser His Ala Arg Asn Ala His Phe 275 280 285

Arg Arg Thr Ala Ser Phe His Glu Ala Arg Gln Ala Arg Pro Phe Arg 290 295 300 Glu Arg Ser Met Ser Thr Leu Thr Pro Arg Gln Ala Pro Ala Tyr Ser 305 310 315 . 320 Ser Arg Thr Arg Thr Cys Glu Gln Ala Glu Asp Arg Phe Arg Pro Gln 325 330 335 Ser Arg Gly Ala His Leu Phe Pro Glu Lys Leu Glu His Phe Gln Glu 340 345 350 Ala Ser Gly Thr Arg Gly Pro Leu Asn Pro Leu Pro Lys Ser Tyr Thr 360 . 355 365 Leu Gly Gln Pro Leu Arg Lys Pro Asp Leu Gly Asp His Gln Ala Gly 370 375 380 Leu Val Ala Gly Ile Glu Arg Thr Glu Pro His Arg Ala Arg Arg Gly. 390 385 395 400 Pro Ser Pro Ser His Lys Ser Val Ser Arg Lys Gln Ser Ser Pro Ile 405 410 . 415 Ser Pro Lys Asp Asn Tyr Gln Arg Val Ser Ser Leu Ser Pro Ser Gln 420 425 430 Cys Arg Lys Asp Lys Cys Gln Ser Phe Pro Thr His Pro Glu Phe Ala 435 · 440 · 445 Phe Tyr Asp Asn Thr Ser Phe Gly Leu Thr Glu Ala Glu Gln Arg Met 450 455 460 Leu Asp Leu Pro Gly Tyr Phe Gly Ser Asn Glu Glu Asp Glu Thr Thr 465 . 470. 475 480 Ser Thr Leu Ser Val Glu Lys Leu Val Ile 485 490 . <210> 1684 <211> 178 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (123) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (175) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1684 Met Ala Met Val Pro Gly Ala Thr Leu Arg Arg Leu Leu Ser Val Val .1 5 10 15 .

Leu Pro Thr Ala Ser Gln Pro Gln Leu Leu Ala Leu Leu Asp Ser Ala 20 25 30 Thr Glu Arg His Val Asp His Ala Ala Glu Ser Asp Gly Gly Ala Glu 35 40 45 . Gln Ala Asp Val Gly Arg Arg Arg Lys His Gln Ser Trp Trp Gln Ala 55 . 60 Leu Asp Gly Lys Leu Arg Gly Asp Leu Ile Ser Arg Gly Leu Glu Lys 65 70 75 80 Met Leu Trp Ala Arg Lys Arg Lys Gln Ser Ile Leu Lys Lys Thr Cys 85 90 95 Leu Pro Leu Arg Glu Arg Met Ile Phe Ser Gly Lys Gly Ser Trp Pro 100 • 105 110 His Leu Ser Leu Glu Pro Ile Gly Glu Leu Xaa Pro Val Pro Ile Val 115 120 125 Gly Ala Glu Thr Ile Asp Leu Leu Asn Thr Gly Glu Lys Leu Phe Ile 130 135 140 Phe Arg Asn Pro Lys Glu Pro Glu Ile Ser Leu His Val Pro Pro Arg 145 150 155 160 Lys Lys Lys Asn Phe Leu Asn Ala Lys Lys Ala Met Arg Ala Xaa Gly 165 170 175 Met Asp <210> 1685 <211> 200 <212> PRT <213> Homo sapiens <400> 1685 Met Ala Met Val Pro Gly Ala Thr Leu Arg Arg Leu Leu Ser Val Val 5. 1 1.0 15 Leu Pro Thr Ala Ser Gln Pro Gln Leu Leu Ala Leu Leu Asp Ser Ala 20 25 30 Thr Glu Arg His Val Asp His Ala Ala Glu Ser Asp Gly Gly Ala Glu. 35 40 45 Gln Ala Asp Val Gly Arg Arg Arg Lys His Gln Ser Trp Trp Gln Ala 50 55 60 Leu Asp Gly Lys Leu Arg Gly Asp Leu Ile Ser Arg Gly Leu Glu Lys

65707580Met Leu Trp Ala Arg Lys Arg Lys Gln Ser Ile Leu Lys Lys Thr Cys859095

Leu Pro Leu Arg Glu Arg Met Ile Phe Ser Gly Lys Gly Ser Trp Pro

His Leu Ser Leu Glu Pro Ile Gly Glu Leu Gly Pro Val Pro Ile Val . Gly Ala Glu Thr Ile Asp Leu Leu Asn Thr Gly Glu Lys Leu Phe Ile 135 · 140 Phe Arg Asn Pro Lys Glu Pro Glu Ile Ser Leu Thr Phe Leu Gln Glu Lys Glu Asp Leu Phe Glu Cys Pro Lys Gly His Glu Gly Leu Gly His 165 170 Gly Leu Ala Gln Gly Lys Asp Leu Arg Glu His Met Lys Arg Glu Gly Met Ile Phe Ser Cys Pro Pro Val 200 、 <210> 1686 -<211> 419 <212> PRT <213> Homo sapiens <400> 1686 Met Ser Cys Ala Gly Arg Ala Gly Pro Ala Arg Leu Ala Ala Leu Ala Leu Leu Thr Cys Ser Leu Trp Pro Ala Arg Ala Asp Asn Ala Ser Gln Glu Tyr Tyr Thr Ala Leu Ile Asn Val Thr Val Gln Glu Pro Gly Arg Gly Ala Pro Leu Thr Phe Arg Ile Asp Arg Gly Arg Tyr Gly Leu Asp Ser Pro Lys Ala Glu Val Arg Gly Gln Val Leu Ala Pro Leu Pro Leu His Gly Val Ala Asp His Leu Gly Cys Asp Pro Gln Thr Arg Phe Phe . 95 Val Pro Pro Asn Ile Lys Gln Trp Ile Ala Leu Leu Gln Arg Gly Asn Cys Thr Phe Lys Glu Lys Ile Ser Arg Ala Ala Phe His Asn Ala Val 120 . Ala Val Val Ile Tyr Asn Asn Lys Ser Lys Glu Glu Pro Val Thr Met Thr His Pro Gly Thr Gly Asp Ile Ile Ala Val Met Ile Thr Glu Leu 155 ··· Arg Gly Lys Asp Ile Leu Ser Tyr Leu Glu Lys Asn Ile Ser Val Gln 

Met	Thr	Ile	Ala 180	Val	Gly	Thr	Arg	Met 185	Pro	Pro	Lys	Asn	Phe 190	Ser	Arg
Gly	Ser	Leu 195	Val	Phe	Val	Ser	Ile 200	Ser	Phe	Ile	Val	Leu 205	Met	Ile	Ile
Ser	Ser 210	Ala	Trp	Leu	Ile	Phe 215	Tyr	Phe	Ile	Gln	Lys 220	Ile	Arg	Tyr	Thr
Asn 225	Ala	Arg	Asp	Arg	Asn 230	Gln	Arg	Arg	Leu	Gly 235	Asp	Ala	Ala	Lys	Lys 240
Ala	Ile	Ser	Lys	Leu 245	Thr	Thr	Arg	Thr	Val 250	Lys	Lys	Gly	Asp	Lys 255	Glu
Thr	Asp	Pro	Asp 260	Phe	Asp	His	Cys	Ala 265	Val	Cys	Ile	Glu	Ser 270	Tyr	Lys
Gln	Asn	Asp 275	Val	Val	Arg	Ile	Leu 280	Pro	Cys	Lys	His	Val 285	Phe	His	Lys
Ser	Cys 290	Val	Asp	Pro	Trp	Leu 295	Ser	Glu	His	Cys	Thr 300	Cys	Pro	Met	Cys
Lys 305	Leu	Asn	Ile	Leu	Lys 310	Ala	Leu	Gly	Ile	Val '315	Pro	Asn	Leu	Pro	Cys 320
Thr	Asp	Asn	Val	Aļa 325	Phe	Asp	Met	Glu	Arg 330	Leu	Thr	Arg	Thr	Gln 335	Ala
Val	Asn	Arg	Arg 340	Ser	Ala	Leu	Gly	Asp 345	Leu	Ala	Gly	Asp	Asn 350	Ser	Leu
Gly	Leu	Glu 355	Pro	Leu	Arg	Thr	Ser 360	Gly	Ile	Şer	Pro	Leu 365	Pro	Gln	Asp
Gly	Glu 370	Leu	Thr	Pro	Arg	Thr 375	Gly	Glu	Ile	Asn	Ile 380	Ala	Val	Thr	Lys
Glu 385	Trp	Phe	Ile	Ile	Ala 390	Ser	Phe	Gly	Leu	Leu 395	Ser	Ala	Leu	Thr	Leu 400
Cys	Tyr	Met		Ile 405	Arg	Ala <sub>.</sub>	Thr	Ala	Ser 410	Leu	Asn	Ala	Asn	Glu 415	Val
Glu	Trp	Phe													

<210> 1687 <211> 419 <212> PRT <213> Homo sapiens

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<400> 1687
Met Ser Cys Ala Gly Arg Ala Gly Pro Ala Arg Leu Ala Ala Leu Ala
1 5 10 15

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Leu Leu Thr Cys Ser Leu Trp Pro Ala Arg Ala Asp Asn Ala Ser Gln Glu Tyr Tyr Thr Ala Leu Ile Asn Val Thr Val Gln Glu Pro Gly Arg Gly Ala Pro Leu Thr Phe Arg Ile Asp Arg Gly Arg Tyr Gly Leu Asp Ser Pro Lys Ala Glu Val Arg Gly Gln Val Leu Ala Pro Leu Pro Leu His Gly Val Ala Asp His Leu Gly Cys Asp Pro Gln Thr Arg Phe Phe Val Pro Pro Asn Ile Lys Gln Trp Ile Ala Leu Leu Gln Arg Gly Asn Cys Thr Phe Lys Glu Lys Ile Ser Arg Ala Ala Phe His Asn Ala Val Ala Val Val Ile Tyr Asn Asn Lys Ser Lys Glu Glu Pro Val Thr Met Thr His Pro Gly Thr Gly Asp Ile Ile Ala Val Met Ile Thr Glu Leu · 155 .160 Arg Gly Lys Asp Ile Leu Ser Tyr Leu Glu Lys Asn Ile Ser Val Gln .165 Met Thr Ile Ala Val Gly Thr Arg Met Pro Pro Lys Asn Phe Ser Arg Gly Ser Leu Val Phe Val Ser Ile Ser Phe Ile Val Leu Met Ile Ile Ser Ser Ala Trp Leu Ile Phe Tyr Phe Ile Gln Lys Ile Arg Tyr Thr Asn Ala Arg Asp Arg Asn Gln Arg Arg Leu Gly Asp Ala Ala Lys Lys Ala Ile Ser Lys Leu Thr Thr Arg Thr Val Lys Lys Gly Asp Lys Glu Thr Asp Pro Asp Phe Asp His Cys Ala Val Cys Ile Glu Ser Tyr Lys Gln Asn Asp Val Val Arg Ile Leu Pro Cys Lys His Val Phe His Lys Ser Cys Val Asp Pro Trp Leu Ser Glu His Cys Thr Cys Pro Met Cys Lys Leu Asn Ile Leu Lys Ala Leu Gly Ile Val Pro Asn Leu Pro Cys Thr Asp Asn Val Ala Phe Asp Met Glu Arg Leu Thr Arg Thr Gln Ala

335 .

Val Asn Arg Arg Ser Ala Leu Gly Asp Leu Ala Gly Asp Asn Ser Leu 340 345 -350 Gly Leu Glu Pro Leu Arg Thr Ser Gly Ile Ser Pro Leu Pro Gln Asp 355 360 365 Gly Glu Leu Thr Pro Arg Thr Gly Glu Ile Asn Ile Ala Val Thr Lvs 370 375 380 Glu Trp Phe Ile Ile Ala Ser Phe Gly Leu Leu Ser Ala Leu Thr Leu 385 390 395 400 Cys Tyr Met Ile Ile Arg Ala Thr Ala Ser Leu Asn Ala Asn Glu Val 405 410 415 Glu Trp Phe <210> 1688 <211> 143 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (120) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (142) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1688 Met Ala Phe Ser Lys Leu Leu Glu Gln Ala Gly Gly Val Gly Leu Phe 1 5 10 15 Gln Thr Leu Gln Val Leu Thr Phe Ile Leu Pro Cys Leu Met Ile Pro 20 25 30 Ser Gln Met Leu Leu Glu Asn Phe Ser Ala Ala Ile Pro Gly His Arg 35. 40 45 . Cys Trp Thr His Met Leu Asp Asn Gly Ser Ala Val Ser Thr Asn Met 50 55 60 Thr Pro Lys Ala Leu Leu Thr Ile Ser Ile Pro Pro Gly Pro Asn Gln 65 70 75 80 Gly Pro His Gln Cys Arg Arg Phe Arg Gln Pro Gln Trp Gln Leu Leu . 95 85 90 Asp Pro Asn Ala Thr Ala Thr Ser Trp Ser Glu Ala Asp Thr Glu Pro 100 105 110 Cys Val Asp Gly Trp Val Tyr Xaa Arg Arg Ser Ser Pro Pro Pro Ser

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120

Trp Pro Ser Gly Thr Trp Cys Ala Ala Pro Arg Leu Glu Xaa Pro 130 135 140 <210> 1689 <211> 515 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (145) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (151) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (168) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1689 Met Ala Phe Ser Lys Leu Leu Glu Gln Ala Gly Gly Val Gly Leu Phe 1 5 10 15 Gln Thr Leu Gln Val Leu Thr Phe Ile Leu Pro Cys Leu Met Ile Pro 20 . 25 30 Ser Gln Met Leu Leu Glu Asn Phe Ser Ala Ala Ile Pro Gly His Arg 35 . 40 45 Cys Trp Thr His Met Leu Asp Asn Gly Ser Ala Val Ser Thr Asn Met 50 55 60 Thr Pro Lys Ala Leu Leu Thr Ile Ser Ile Pro Pro Gly Pro Asn Gln 65 70 75 80 Gly Pro His Gln Cys Arg Arg Phe Arg Gln Pro Gln Trp Gln Leu Leu 85 · 90 . 95 · Asp Pro Asn Ala Thr Ala Thr Ser Trp Ser Glu Ala Asp Thr Glu Pro 100 105 110 Cys Val Asp Gly Trp Val Tyr Asp Arg Ser Val Phe Thr Ser Thr Ile 115 120 125 Val Ala Lys Trp Asp Leu Val Cys Ser Ser Gln Gly Leu Lys Pro Leu 130 135 140 Xaa Gln Ser Ile Phe Met Xaa Gly Ile Leu Val Gly Ser Phe Ile Trp 145 150 155 160 Gly Leu Leu Ser Tyr Arg Phe Xaa Arg Lys Pro Met Leu Ser Trp Cys 165 170 175 Cys Leu Gln Leu Ala Val Ala Gly Thr Ser Thr Ile Phe Ala Pro Thr

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			180					185					190		
Phe	Val	Ile 195	Tyr	Cys	Gly	Leu	Arg 200	Phe	Val	Ala	Ala	Phe 205	Gly	Met	Ala
Gly	Ile 210	Phe	Leu	Ser	Ser	Leu 215	Thr	Leu	Met	Val	Glu 220	Trp	Thr	Thr	Thr
Ser 225	Arg	Arg	Ala	Val	Thr 230	Met	Thr	Val		Gly 235	Cys	Ala	Phe	Ser	Ala 240
Gly	Gln	Ala	Ala	Leu 245	Gly	Gly	Leu	Ala	Phe 250	Ala	Leu	Arg	Asp	Trp 255	Arg
Thr	Leu	Gln	Leu 260	Ala	Ala	Ser	Val	Pro 265	Phe	Phe	Ala	Ile	Ser 270	Leu	Ile
Ser	Trp	Trp 275	Leu	Pro	Glu	Ser	Ala 280	Arg	Trp	Leu	Ile	Ile 285	Lys	Gly	Lys
Pro	Asp 290	Gln	Ala	Leu	Gln	Glu 295	Leu	Arg	Lys	Val	Ala 300	Arg	Ile	Asn.	Gly
His 305		Glu	Ala	Lys	Asn 310	Leu	Thr	Ile	Glu	Val 315	Leu	Met	Ser	Ser	Val 320
Lys	Glu	Glu	Val	Ala 325	Ser	Ala	Lys	Glu	Pro 330	Arg	Ser	Val	Leu	Asp 335	Leu
Phe	Cys	Val	Pro 340	Val	Leu	Arg	Trp	Arg 345	Ser	Cys	Ala	Met	Leu 350	Val	Val
Asn	Phe	Ser 355	Leu	Leu	Ile	Ser	Tyr 360	Tyr	Gly	Leu	Val	Phe 365	Asp	Leu	Gln
Ser	Leu 370	Gly	Arg	Asp	Ile	Phe 375	Leu	Leu	Gln	Ala	Leu 380	Phe	Gly	Ala	Val
385					390					395					Gly. 400
				Gln 405					410					415	
			420	Leu			· <b>-</b> .	425					430		
		435		Gly			440					445			
	450		•	Ala		455					460 ·		_		
465				Ser	470					475					480
				Leu 485					490	•				495	
Ser	Thr	<u>A</u> la	Ala	Gln	Gly	Asn	Arg		Glu 063	Ala	Val	Thr	Val	Glu	Ser

500 505 · 510 Thr Ser Leu 515 <210> 1690 <211> 88 <212> PRT <213> Homo sapiens <400> 1690 Met Asp Trp Trp Phe Leu Ala Ile Ala Met Ala Leu Leu Trp Leu Thr 1 5 10 . 15 Thr Ser Arg Lys Gln Cys Cys Ser Thr Trp Ala Leu Leu Asn Tyr Met 20 25 30 Ala Leu Met Ile Leu Ile Gly Glu Asn Pro Asp Leu Leu Val Asn Leu 35 40 45 Asp Ser Leu Gln Glu Pro Val Cys Val Ile Leu Val Lys Gly Leu Leu 50 55 60 Phe Gln Arg Ile Ala Ala Asn Leu Gln Pro Leu Val Leu His His His 65 70 75 80 Thr Ile Gln Met Met Asn Lys Lys 85 . . <210> 1691 <211> 81 <212> PRT <213> Homo sapiens <400> 1691 Met Asp Trp Trp Phe Leu Ala Ile Ala Met Ala Leu Leu Trp Leu Thr 5 1 10 . 15 . Thr Ser Arg Lys Gln Cys Cys Ser Thr Trp Ala Leu Leu Asn Tyr Met 20 25 30 Ala Leu Met Ile Leu Ile Gly Glu Asn Pro Asp Leu Leu Val Asn Leu 35 . 45 40 Asp Ser Leu Gln Glu Pro Val Cys Val Ile Leu Val Lys Gly Leu Leu 50 55 60 Phe Gln Arg Ile Ala Ala Asn Leu Gln Pro Leu Gln Arg Cys Gln Gly 65 70 75 80

Ser

<210> 1692

<211> 462 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (148) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (149) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (204) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (292) ... <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (303) <223> Xaa equals any of the naturally occurring L-amino acids · · <400> 1692 Met Val Asp Tyr Leu Gln Lys Ala Val Leu Leu Asn Leu Gly Thr Ile 1 . 5 10 15 Glu Leu Tyr Gly Ser Asn Asp Pro Tyr Arg Arg Glu Pro Arg Ser Pro 20 25 3.0 Arg Lys Ser Arg Gln Pro Ser Gly Ala Gly Leu Cys Asp Ile Ser Glu 35 40 · 45 Gly Thr Val Val Pro Glu Asp Arg Cys Lys Ser Pro Thr Ser Ala Lys 55 50 . 60 Met Ser Arg Lys Leu Ser Leu Pro Thr Asp Leu Lys Pro Asp Leu Asp 65 70 75 . . . 80 Val Lys Asp Asn Ser Phe Ser Arg Ser Arg Ser Ser Ser Val Thr Ser 85 90 95 Ile Asp Lys Glu Ser Arg Glu Ala Ile Ser Ala Leu His Phe Cys Glu 100 105 110 Thr Phe Thr Arg Lys Thr Asp Ser Ser Pro Ser Pro Cys Leu Trp Val 115 120 125 Gly Thr Thr Leu Gly Thr Val Leu Val Ile Ala Leu Asn Leu Pro Pro 130 135 140 Gly Gly Glu Xaa Xaa Leu Leu Gln Pro Val Ile Val Ser Pro Ser Gly - 145 150 155 160

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Thr Ile Leu Arg Leu Lys Gly Ala Ile Leu Arg Met Ala Phe Leu Asp Thr Thr Gly Cys Leu Ile Pro Pro Ala Tyr Glu Pro Trp Arg Glu His Asn Val Pro Glu Glu Lys Asp Glu Lys Glu Lys Xaa Lys Lys Arg Arg Pro Val Ser Val Ser Pro Ser Ser Gln Glu Ile Ser Glu Asn Gln Tyr Ala Val Ile Cys Ser Glu Lys Gln Ala Lys Val Ile Ser Leu Pro . Thr Gln Asn Cys Ala Tyr Lys Gln Asn Ile Thr Glu Thr Ser Phe Val Leu Arg Gly Asp Ile Val Ala Leu Ser Asn Ser Ile Cys Leu Ala Cys Phe Cys Ala Asn Gly His Ile Met Thr Phe Ser Leu Pro Ser Leu Arg Pro Leu Leu Xaa Val Tyr Tyr Leu Pro Leu Thr Asn Met Arg Xaa Ala . 295 Arg Thr Phe Cys Phe Thr Asn Asn Gly Gln Ala Leu Tyr Leu Val Ser Pro Thr Glu Ile Gln Arg Leu Thr Tyr Ser Gln Glu Thr Cys Glu Asn . 330 Leu Gln Glu Met Leu Gly Glu Leu Phe Thr Pro Val Glu Thr Pro Glu Ala Pro Asn Arg Gly Phe Phe Lys Gly Leu Phe Gly Gly Gly Ala Gln . 360 . . Ser Leu Asp Arg Glu Glu Leu Phe Gly Glu Ser Ser Ser Gly Lys Ala Ser Arg Ser Leu Ala Gln His Ile Pro Gly Pro Gly Gly Ile Glu Gly . .Val Lys Gly Ala Ala Ser Gly Val Val Gly Glu Leu Ala Arg Ala Arg Leu Ala Leu Asp Glu Arg Gly Gln Lys Leu Gly Asp Leu Glu Glu Arg 425 430 Thr Ala Ala Met Leu Ser Ser Ala Glu Ser Phe Ser Lys His Ala His Glu Ile Met Leu Lys Tyr Lys Asp Lys Lys Trp Tyr Gln Phe

<210> 1693

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<211> 112 <212> PRT <213> Homo sapiens <400> 1693 Met Leu Ile Ser Gly Trp Ala Arg Trp Leu Met Pro Leu Val Pro Ala 1 . 5 . 10 15 Leu Trp Glu Ala Glu Ala Gly Glu Ser Gly Val Gln Asp Gln Pro Gly 20 25 30 Gln Cys Gly Glu Thr Leu Ser Leu Leu Lys Ile Lys Lys Lys Lys . 35 40 45 Lys Lys Trp Leu Ile Ser Glu Ser Tyr Ser Gly Leu Asn Ser Val Ile 55 50 60 Gln Pro Lys Leu Ile Thr Leu Cys Tyr Leu Trp Glu Pro His Leu Lys 65 70 75 • 80 Ser Lys Asp Pro Asp Thr Cys Leu Ile Leu Trp Gln Gly Ser Asn Glu 85 90 95 Ser Asn Lys Met Leu Val Lys Val Arg Thr Gly Ser Ile Leu Asn Thr 100 105 110 <210> 1694 <211> 82 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (45) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (76) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1694 Met Gly Leu Gln Ser Arg Leu Ser Gln Pro Cys His Cys Arg His Leu 1 · 5 10 15 Gly Leu Gly Asn Ser Val Val Gly Thr Val Leu Phe Leu Val Gly Cys 20 25 . 30 . Leu Val Ala Ser Leu Pro'Pro Pro Thr Arg Cys Gln Xaa His Cys Ser 35 40 45 . Pro Gln Pro Pro Ala Pro Val Val Thr Ile Val Ser Lys His Cys Gln 50 55 60 Met Val Gln Gly Lys Gly Lys Ile Ala Pro Val Xaa Lys Ser Thr Ala

PCT/US01/11988

WO 01/77137 65 70 75 80 Val Lys <210> 1695 <211> 82 <212> PRT <213> Homo sapiens <400> 1695 Met Gly Leu Gln Ser Arg Leu Ser Gln Pro Cys His Cys Arg His Leu 1 5 . 10 15 Gly Leu Gly Asn Ser Val Val Gly Thr Val Leu Phe Leu Val Gly Cys 20 25 30 Leu Val Ala Ser Leu Pro Pro Pro Thr Arg Cys Gln Gly His Cys Ser 35 . 40 45 Pro Gln Pro Pro Ala Pro Val Val Thr Ile Val Ser Lys His Cys Gln 50 55 60 Met Val Gln Gly Lys Gly Lys Ile Ala Pro Val Glu Lys Ser Thr Ala б5 70 75 . 80 Val Lys <210> 1696 <211> 193 <212> PRT <213> Homo sapiens <400> 1696 Met Gln Leu Gly Thr Leu Leu Thr Phe Phe His Glu Leu Val Gln Thr 1 5 10 15 Ala Leu Pro Ser Gly Ser Cys Val Asp Thr Leu Leu Lys Asp Leu Cys 20 25 30 Lys Met Tyr Thr Thr Leu Thr Ala Leu Val Arg Tyr Tyr Leu Gln Val · . 35 40 45 Cys Gln Ser Ser Gly Gly Ile Pro Lys Asn Met Glu Lys Leu Val Lys 50

55 60 Leu Ser Gly Ser His Leu Thr Pro Leu Cys Tyr Ser Phe Ile Ser Tyr 65 70 75 80 Val Gln Asn Lys Ser Lys Ser Leu Asn Tyr Thr Gly Glu Lys Lys Glu 85 90 95 Lys Pro Ala Ala Val Ala Thr Ala Met Ala Arg Val Leu Arg Glu Thr 100 105 110

1068

Lys Pro Ile Pro Asn Leu Ile Phe Ala Ile Glu Gln Tyr Glu Lys Phe 115 120 · 125 Leu Ile His Leu Ser Lys Lys Ser Lys Val Asn Leu Met Gln His Met 130 135 140 . Lys Leu Ser Thr Ser Arg Asp Phe Lys Ile Lys Gly Asn Ile Leu Asp 145 150 155 160 Met Val Leu Arg Glu Asp Gly Glu Asp Glu Asn Glu Glu Gly Thr Ala 165 170 175 Ser Glu His Gly Gly Gln Asn Lys Glu Pro Ala Lys Lys Arg Lys 180 185 190 Lys <210> 1697 <211> 193 <212> PRT <213> Homo sapiens <400> 1697 Met Gln Leu Gly Thr Leu Leu Thr Phe Phe His Glu Leu Val Gln Thr 5 1 10 15 Ala Leu Pro Ser Gly Ser Cys Val Asp Thr Leu Leu Lys Asp Leu Cys 20 25 30 Lys Met Tyr Thr Thr Leu Thr Ala Leu Val Arg Tyr Tyr Leu Gln Val 35 40 45 .

Cys Gln Ser Ser Gly Gly Ile Pro Lys Asn Met Glu Lys Leu Val Lys 50 55 60 Leu Ser Gly Ser His Leu Thr Pro Leu Cys Tyr Ser Phe Ile Ser Tyr

 65
 70
 75
 80

 Val Gln Asn Lys Ser Lys Ser Leu Asn Tyr Thr Gly Glu Lys Lys Glu
 85
 90
 95

 Lys Pro Ala Ala Val Ala Thr Ala Met Ala Arg Val Leu Arg Glu Thr

Lys Pro Ile Pro Asn Leu Ile Phe Ala Ile Glu Gln Tyr Glu Lys Phe 115 120 125

Leu Ile His Leu Ser Lys Lys Ser Lys Val Asn Leu Met Gln His Met 130 135 140

LysLeuSerThrSerArgAspPheLysIleLysGlyAsnIleLeuAsp145150150155160MetValLeuArgGluAspGlyGluAspGluAsnGluGluGlyThrAla165170175175175

Ser Glu His Gly Gly Gln Asn Lys Glu Pro Ala Lys Lys Arg Lys

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	180		185	190	
Lys			• .		
<210> 1698 <211> 22 <212> PRT <213> Homo si	apiens				
<400> 1698 . Met Val Cys i 1	Asp Ser Leu 5	Pro Arg	His Asp Phe 10	His Pro Ala	Arg Leu 15
His Pro Thr )	Arg Phe Leu 20				
<210> 1699 <211> 271 <212> PRT <213> Homo sa	apiens	•			
<400> 1699 Met Leu Ser ( 1	Glu Lys His 5	Leu Ile	Ser Val Cys 10	Ala Asp Asn	Asn His 15
Val Arg Thr :	-	Thr Arg		Met Ile Ser 30	
Pro Gly Ser 3 35	Thr Pro Leu	Ala Ser 40	Phe Lys Ile	Leu Ala Leu 45	Glu Ser
Ala Asp Gly H 50	His Gly Gly	Cys Ser 55	Ala Gly Asn	Asp Ile Gly 60	Pro Tyr
Gly Glu Arg A 65	Asp Asp Gln 70	Gln Val	Phe Ile Gln 75	Lys Val Val	Pro Ser 80
Ala Ser Gln I	Leu Phe Val 85	Arg Leu	Ser Ser Thr 90	Gly Gln Arg	Val Cys 95
Ser Val Arg S	Ser Val Asp 100		Pro Thr Thr 105	Ala Phe Thr 110	Val Leu
Glu Cys Glu ( 115	Gly Ser Arg	Arg Leu 120	Gly Ser Arg	Pro Arg Arg 125	Tyr Leu
Leu Thr Gly ( 130	Gln Ala Asn	Gly Ser 135	Leu Ala Met	Trp Asp Leu 140	Thr Thr
Ala Met Asp ( 145	Gly Leu Gly 150	Gln Ala	Pro Ala Gly 155	Gly Leu Thr	Glu Gln 160
Glu Leu Met (	Glu Gln Leu 165	Glu His	Cys Glu Leu 170		Ala Pro 175 <sub>.</sub>

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Ser Ala Pro Ser Trp.Gly Cys Leu Pro Ser Pro Ser Pro Arg Ile Ser 180 185 190 Leu Thr Ser Leu His Ser Ala Ser Ser Asn Thr Ser Leu Ser Gly His 195 · 200 205 Arg Gly Ser Pro Ser Pro Pro Gln Ala Glu Ala Arg Arg Arg Gly Gly 210 215 220 Gly Ser Phe Val Glu Arg Cys Gln Glu Leu Val Arg Ser Gly Pro Asp 225 230 235 240 Leu Arg Arg Pro Pro Thr Pro Ala Pro Trp Pro Ser Ser Gly Leu Gly 245 250 255 Thr Pro Leu Thr Pro Pro Lys Met Lys Leu Asn Glu Thr Ser Phe 260 ... 265 . 270 <210> 1700 <211> 148 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (71) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (125) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1700 Met Arg Ser Ser Cys Val Leu Leu Thr Ala Leu Val Ala Leu Ala Ala 1 5 10 15 Tyr Tyr Val Tyr Ile Pro Leu Pro Gly Ser Val Ser Asp Pro Trp Lys 20 25 30 Leu Met Leu Leu Asp Ala Thr Phe Arg Gly Ala Gln Gln Val Ser Asn 35 40 45 . . Leu Ile His Tyr Leu Gly Leu Ser His His Leu Leu Ala Leu Asn Phe 50 55 60 Ile Ile Val Ser Phe Gly Xaa Lys Ser Ala Trp Ser Ser Ala Gln Val 65 70 75 · . 80 Lys Val Thr Asp Thr Asp Phe Asp Gly Val Glu Val Arg Val Phe Glu 85 90 95 Gly Pro Pro Lys Pro Glu Glu Pro Leu Lys Arg Ser Val Val Tyr Ile 100 105 110 His Gly Gly Gly Trp Ala Leu Ala Ser Ala Lys Ile Xaa Tyr Tyr Asp 115

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125

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Glu Leu Cys Thr Ala Met Ala Glu Glu Leu Asn Ala Ala Leu Phe Pro 130 135 140 Leu Asn Thr Gly 145 <210> 1701 <211> 148 <212> PRT <213> Homo sapiens <220> <221> SITE . <222> (71) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (125) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1701 Met Arg Ser Ser Cys Val Leu Leu Thr Ala Leu Val Ala Leu Ala Ala 1 5 10 15 Tyr Tyr Val Tyr Ile Pro Leu Pro Gly Ser Val Ser Asp Pro Trp Lys 20 . 25 . 30 Leu Met Leu Leu Asp Ala Thr Phe Arg Gly Ala Gln Gln Val Ser Asn . 35 40 45 Leu Ile His Tyr Leu Gly Leu Ser His His Leu Leu Ala Leu Asn Phe 50 55 60 Ile Ile Val Ser Phe Gly Xaa Lys Ser Ala Trp Ser Ser Ala Gln Val 65 75 70 80 Lys Val Thr Asp Thr Asp Phe Asp Gly Val Glu Val Arg Val Phe Glu 85 90 95 Gly Pro Pro Lys Pro Glu Glu Pro Leu Lys Arg Ser Val Val Tyr Ile 100 105 110 His Gly Gly Gly Trp Ala Leu Ala Ser Ala Lys Ile Xaa Tyr Tyr Asp 120 115 125 Glu Leu Cys Thr Ala Met Ala Glu Glu Leu Asn Ala Ala Leu Phe Pro 130 135 140 Leu Asn Thr Gly 145 <210> 1702 <211> 408 <212> PRT

<213> Homo sapiens

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Thr Ser Leu Leu Pro Ala Ser Phe Thr Lys Asn Tyr Lys Pro Val Val 290 295 300 Gln Thr Thr Gly Asn Ala Arg Ile Val Gln Glu Leu Pro Gln Leu Leu 305 310 315 320 Asp Ala Arg Ser Ala Pro Leu Ile Ala Asp Gln Ala Val Leu Gln Leu 325 330 335 Leu Pro Lys Thr Tyr Ile Leu Thr Cys Glu His Asp Val Leu Arg Asp . 340 345 350 Asp Gly Ile Met Tyr Ala Lys Arg Leu Glu Ser Ala Gly Val Glu Val 355 360 , 365 Thr Leu Asp His Phe Glu Asp Gly Phe His Gly Cys Met Ile Phe Thr 370 375 380 Ser Trp Pro Thr Asn Phe Ser Val Gly Ile Arg Thr Arg Asn Ser Tyr 385 390 395 . 400 . Ile Lys Trp Leu Asp Gln Asn Leu 405 <210> 1703 <211> 88 <212> PRT <213> Homo sapiens <400> 1703 Met Met Phe Cys Phe Val Leu Phe Leu Arg Trp Ser Leu Ala Leu Leu 5 1 10 1.5 Pro Gly Trp Leu Ala Val Ala Arg Ser Arg Leu Thr Ala Ile Ser Cys . 20 25 30 Phe Leu Gly Leu Ser Asp Ser Pro Ala Leu Ala Ser Arg Val Ala Gly 35 40 45 Thr Thr Gly Ala His His His Ala Arg Leu Val Phe Cys Ile Leu Val 50 55 60 . . . Glu Thr Val Ser Pro Cys Trp Pro Gly Trp Ser Arg Ser Pro Asp Phe <sup>.</sup> 65 70 75 80 Val Ile Cys Leu Pro Gln Thr Pro 🐇 85 <210> 1704 <211> 88 <212> PRT <213> Homo sapiens <400> 1704

Met Met Phe Cys Phe Val Leu Phe Leu Arg Trp Ser Leu Ala Leu Leu

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1 5 · 10 15 Pro Gly Trp Leu Ala Val Ala Arg Ser Arg Leu Thr Ala Ile Ser Cys 20 25 30 Phe Leu Gly Leu Ser Asp Ser Pro Ala Leu Ala Ser Arg Val Ala Gly 35 40 45 Thr Thr Gly Ala His His His Ala Arg Leu Val Phe Cys Ile Leu Val 50 55 60 Glu Thr Val Ser Pro Cys Trp Pro Gly Trp Ser Arg Ser Pro Asp Phe 65 70 75 80 Val Ile Cys Leu Pro Gln Thr Pro 85 <210> 1705 <211> 94 <212> PRT <213> Homo sapiens . <400> 1705 Met Ile Gly Tyr Arg Leu Cys Leu His Leu Leu Ser Leu Leu Gly Phe 1 5 10 15 Gln Pro Leu Pro Met Gly Leu Cys Arg Val Arg Glu Gln Lys Phe Lys 20 25 30. Gln Phe Ser Gly Leu Ser His Phe Ser Phe Arg Ile Ser Pro Val Thr 35 40 45 Phe Pro Ser Tyr Val His Ala Asp Ser Gln Pro Thr Arg Asp Lys Trp . 50 Val Pro Trp Asp Leu Ser Ser Phe Thr Cys Met Cys Ala Glu Ala Ser 65 . 70 . 75 80 Lys Ser Ala Arg Asn Val Trp Thr Ala Leu Gln Thr Pro Leu 85 90 <210> 1706 <211> 61 <212> PRT <213> Homo sapiens <400> 1706 Ser Gln His Phe Gly Arg Pro Arg Trp Lys Asp Cys Leu Lys Pro Gly 1 5 10. 15 Val Arg Asp Gln Pro Gly Gln His Ser Lys Thr Pro Ser Leu Cys Lys 20 -25 30 Lys Lys Gly Ile Ile Leu Tyr Phe Leu Leu Ile Arg Phe Ile Cys Val 35 · 40 45 .

Ser Asn Leu His Leu Gln Phe Asp Phe Phe Ser Asp Leu 50 55 60 <210> 1707 <211> 101 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (69) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1707 Val Ile Phe Phe Phe Phe Ser Cys Arg Glu Arg Val Cys Val Ala 1 5 10 15 Gln Ala Gly Leu Asn Phe Met Ala Ser Ser Tyr Ser Ala Ser Ala Ser 20 25 30 Arg Ser Ala Gly Asn Ile Gly Met Ser His His Thr Gln Pro Leu Cys 35 40 45 Leu Leu Ser Phe Ser Ile Ile Ile Asn Leu Phe Met Phe Ile His Ser 50 55 60 Pro Val Asp Glu Xaa Leu Gly Cys Phe Gln Phe Trp Ala Val Thr Asn 65 70 75 80 Lys Ala Pro Gly Asn Ile Cys Val Gln Lys Lys Lys Lys Lys Lys 85 90 95 Lys Lys Lys Lys 100 <210> 1708 <211>. 123 <212> PRT <213> Homo sapiens <400> 1708 Met Ala Trp Pro Asn Val Phe Gln Arg Gly Ser Leu Leu Ser Gln Phe 1 5 10 - 15 -Ser His His His Val Val Val Phe Leu Leu Thr Phe Phe Ser Tyr Ser 20 25 . 30 Leu Leu His Ala Ser Arg Lys Thr Phe Ser Asn Val Lys Val Ser Ile 35 40 45 Ser Glu Gln Trp Thr Pro Ser Ala Phe Asn Thr Ser Val Glu Leu Pro 55 50 60 Leu Glu Ile Trp Ser Ser Asn His Leu Phe Pro Ser Ala Glu Lys Ala 65

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Thr Leu Phe Leu Gly Thr Leu Asp Thr Ile Phe Leu Phe Ser Tyr Ala 85 90 95 Val Gly Leu Phe Ile Ser Gly Ile Val Gly Asp Arg Leu Asn Leu Arg 100 105 110 Trp Val Leu Leu Leu Ala Cys Ala Leu Leu His 115 120 <210> 1709 <211> 160 <212> PRT <213> Homo sapiens <22,0> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1709 Leu Pro Asn Cys Tyr Leu Xaa Asp Thr Ile Glu Gly Thr Pro Ala Gly 1 5 10 15 Thr Gly Pro Glu Phe Ala Ala Ala Ser Thr Ser Leu Lys Glu Cys Arg 20 25 30 Ala Val Ile Ile Ala Ser Arg Gly Gln Pro Val Trp Pro Ala Leu Leu 35 40 · 45 Asp Val His Ala Val Asp Asp Phe Val Val Ser Cys Asn Leu Ala His 55 50 60 Arg Arg Ala Thr Ile Pro Glu Glu Asp Cys Ser Lys Leu Leu Pro Ser 65 70 75 80 Phe Pro Asp His Gly Asp Pro Leu Thr Val Phe Ser Pro Ser Asn Val 85 90 95 Phe Asp Leu Pro Ser Glu Arg Leu Val Leu Ile Leu Gln Gln Val Leu . 100 105 110 Leu Leu Arg Gly Ile Pro Asp Pro Gln Leu Pro Arg His Ile Ser Gly 115 120 125 Gly Asn Val Glu Ser Ala Gly Arg Ile Leu Gly His His Leu Met 130 135 140 Gly Val Leu Cys Val Asp Val Ser Lys Gly Trp Val Val Asp Val Pro 145 150 155 160

<210> 1710 <211> 21 <212> PRT

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<213> Homo sapiens <400> 1710 His His Leu Met Gly Val Leu Cys Val Asp Val Ser Lys Gly Trp 1 5. 10 15 Val Val Asp Val Pro 20 . <210> 1711 <211> 185 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (163) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1711 Met Ala Trp Pro Asn Val Phe Gln Arg Gly Ser Leu Leu Ser Gln Phe 5 7 10 15 Ser His His His Val Val Val Phe Leu Leu Thr Phe Phe Ser Tyr Ser 20 25 30 Leu Leu His Ala Ser Arg Lys Thr Phe Ser Asn Val Lys Val Ser Ile . 35 40 45 Ser Glu Gln Trp Thr Pro Ser Ala Phe Asn Thr Ser Val Glu Leu Pro 55 50 60 Leu Glu Ile Trp Ser Ser Asn His Leu Phe Pro Ser Ala Glu Lys Ala 65 70 75 80 Thr Leu Phe Leu Gly Thr Leu Asp Thr Ile Phe Leu Phe Ser Tyr Ala 85. 90 95 Val Gly Leu Phe Ile Ser Gly Ile Val Gly Asp Arg Leu Asn Leu Arg 100 105 110 Trp Val Leu Ser Phe Gly Met Cys Ser Ser Ala Leu Val Val Phe Val 115 - 120 125 Phe Gly Ala Leu Thr Glu Trp Leu Arg Phe Tyr Asn Lys Trp Leu Tyr 130 135 140 Cys Cys Leu Trp Ile Val Asn Gly Leu Leu Gln Ser Thr Gly Trp Pro 145 150 155 160 Cys Val Xaa Ala Val Met Gly Asn Trp Phe Gly Lys Ala Gly Tyr Ala . 165 170 175 Thr Ser Phe Leu Ser Asn Phe Ser Val 180 185

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<210> 1714 <211> 173 <212> PRT <213> Homo sapiens <400> 1714 Met Leu Gln Pro Ala Pro Tyr Lys Pro Leu Pro Glu Val Gly Gly Leu 1 5 10 15 Leu Ser Ser Leu Leu Pro Leu Pro Leu Cys Ser Pro Gln Asp Ala Gly 25 20 30 Gly Ala Trp Thr Pro Ser Ala Gln Ser Gly Gln Ala Ser Gly Arg Pro 35 40 45 Phe Met Gly Leu Ser Ile Leu Gly Pro Ala Gly Leu Arg Pro Thr Ser 50 55 60 Ser Ser Ser Ser Phe Pro Tyr Pro Ser Arg His Phe Gly Gln Gly 65 70 . 75 80 Trp Glu Val Val Arg Met Gly Ala Met Pro Gln Asn Ser Ser Leu Ser 85 ... 90 95 Thr Ala Val Pro Ser Gly Met Gly Asp Gly Cys Gln Val Phe Trp Pro · 100 105 110 Pro Ala Pro Cys Arg Ser Gln Leu Ser Pro Pro Ala Ser Gly Ser Phe 115 120 125 Pro Leu Phe Ser Pro Leu Gln Ala Pro Pro Ser Pro Ser Ser Asp Pro 130 135 140 Ala Gln Ala Pro Gly Ser Cys Gly Ser Ser Ser Gln Pro Arg His Ala 145 150 155 160 Pro Cys Ser Pro Pro Leu Pro Leu Ala Ala Pro Ser Ser 165 170 <210> 1715 <211> 102 <212> PRT <213> Homo sapiens <400> 1715 Met Arg Val Ser Cys Ser Arg Ser Cys Cys Ser Leu Pro Pro Ile Ser 1 5 10 15 • Leu Ser Leu Arg Leu Val Ala Ser Cys Leu Pro Cys Cys Leu Cys Leu 20 25 30 Ser Ala Ala Pro Arg Met Gln Glu Glu Pro Gly His Leu Arg Pro Ser 35 40 45

Arg Ala Arg Pro Leu Glu Gly Pro Ser Trp Asp Ser Pro Ser Leu Ala · 60 Pro Pro Ala Ser Ala Gln Arg Pro Leu Pro Pro Pro Val Ser Arg Ile Leu Pro Ala Thr Ser Gly Arg Ala Gly Arg Trp Cys Gly Trp Ala Pro 9.0 Cys Pro Lys Thr Ala Ala <210> 1716 <211> 180 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (140) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1716 Met Pro Ala Pro Ala Arg Ser Cys Gln Arg Ala Ala Leu Ser Leu Trp Ala Ser Gly Leu Gly Trp Leu Ser Ala Gln Pro Thr Val Ala Phe Arg Gly Ser Ser Trp Asp Trp Glu Pro Pro Gln Gly Gln Ala Asp Gly Val . Arg Phe Val Leu Gly Leu Val Leu Pro Met Leu Gly Gly Gly Gly Ala Pro Arg Thr Asp Gln Pro Cys Phe Ser Cys Asn Ala Val Thr Leu Ser Leu Asn Thr Trp Ile His Val Trp Pro Gly Leu Ala Gly Ser Arg Ser Pro Ala Arg Val Gly Ser His Gly Pro Ala Leu Glu Pro Pro Ser Gly Pro Gly Ala Ala Glu Ala Ala Ser Glu Gly Leu Pro Àrg Pro Ala Phe His Arg Trp Gly Ala Gln Pro Ser Lys Ala Ala Xaa Thr Pro Pro Arg Pro Val Cys Gln Gly Ala Gly His Asn Pro Ala Gly Pro Arg Thr Gly Leu Gln Ala Ser Pro Cys Ala Pro Ala Gly Arg Pro Cys Ser Arg Glu Glu Val Leu Gly

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<400> 1718 Met Pro Ala Pro Ala Arg Ser Cys Gln Arg Ala Ala Leu Ser Leu Trp •.

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Ala Ser Gly	Leu Gly 20	Trp Leu	Ser	Ala 25	Glņ	Pro	Thr	Val	Ala 30	Phe	Arg
Gly Ser Ser 35		Trp Glu	Pro 40	Pro	Gln	Gly	Gln	Ala 45	Asp	Gly	Val
Arg Phe Val 50	Leu Gly	Leu Val 55		Pro	Met	Leu	Gly 60	Gly	Gly	Gly	Ala
Pro Arg Thr 65	Asp Gln	Pro Cys 70	Phe	Ser	Суз	Asn 75	Ala	Val	Thr	Leu	Ser 80
Leu Asn Thr	Trp Ile 85		Trp	Pro	Gly 90	Leu	Ala	Gly	Ser	Arg 95	Ser
Pro Ala Arg	Val Gly 100	Ser His	Gly	Pro 105	Ala	Leu	Glu	Pro	Pro 110	Ser	Gly
Pro Gly Ala 115		Ala Ala	Ser 120	Glu	Gly	Leu	Pro	Arg 125	Pro	Ala	Phe
His Arg Trp 130	Gly Ala	Gln Pro 135	Ser	Lys	Ala	Ala	Glu 140	Thr	Pro	Pro	Arg
Pro Val <sup>°</sup> Cys 145	Gln Gly	Ala Gly 150	His	Asn	Pro	Ala 155	Gly	Pro	Arg	Thr	Gly 160
Leu Gln Ala	Ser Pro 165		Pro	Ala	Gly 170	Arg	Pro	Cys	Ser	Arg 175	Glu
Glu Val Leu	Gly 180							-			
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<220>					-	•	2				

<221> SITE <222> (124) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (126) <223> Xaa equals any of the naturally occurring L-amino acids

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<220> <221> SITE <222> (148)

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<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (171) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (172) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1719 Met Val Gly Lys Ile Lys Arg Leu Lys Lys Ser Ala Phe Val Val Leu · 5 1 :10 15 Ile Leu Leu Ile Thr Ala Lys Leu Leu Val Leu Pro Leu Leu Cys Arg 20 25 30 Glu Met Val Glu Leu Leu Asp Lys Gly Asp Ser Val Val Asn His Thr 35 40 45 Ser Leu Ser Asn Tyr Ala Phe Leu Tyr Gly Val Phe Pro Val Ala Pro 50 . 55 60 Gly Val Ala Ile Phe Ala Thr Gln Phe Asn Met Glu Val Glu Ile Ile 65 70 75 80 Thr Ser Gly Met Val Ile Ser Thr Phe Val Ser Ala Pro Ile Met Tyr 85 90 · 95 Val Ser Ala Trp Leu Leu Thr Phe Pro Thr Met Asp Pro Lys Pro Leu 100 105 110 Ala Tyr Ala Ile Gln Asn Val Xaa Phe Asp Ile Xaa Ile Xaa Ser Leu 115 . 120 . 125 Ile Ser Leu Ile Trp Ser Leu Ala Ile Leu Leu Leu Ser Lys Lys Tyr 130 135 140 Lys Gln Leu Xaa His Met Leu Thr Thr Asn Leu Leu Ile Ala Gln Ser 145 150 155 160 Ile Val Cys Ala Gly Met Met Ile Trp Asn Xaa Xaa Lys Glu Lys Asn 165 · 170 175 . Phe <210> 1720 <211> 447

<212> PRT <213> Homo sapiens <400> 1720

Thr Thr Lys Phe Ala Ala Ala Ser Thr Phe His Pro Ala Ser Lys151015

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Ser Asn Il	.e.Lys Lys 20	: Val Trp		la Glu 25	Gln	Lys	Ile	Ser 30	Tyr	Asp
Lys Lys Ly 3	rs Gln Glu 5	ı Glu Leu	Met G 40	ln Gln	Tyr	Leu	Lys 45	Glu	Gln	Glu
Ser Tyr As 50	p Asn Arg	r Leu Leu 55		ly Asp	.Glu	Arg 60	Val	Lys	Asn	Gly
Leu Asn Ph 65	le Met Tyr	Glu Ala 70	Pro P:	ro Gly	Ala 75	Lys	Lys	Glu	Asn	Lys . 80
Glu Lys Gl	u Glu Thr. 85		Glu T	hr Glu 90	Tyr	Lys	Phe	Glu	Trp 95	Gln
Lys Gly Al	a Pro Arg 100	Glu Lys		la Lys 05	Asp .	Asp	Met	Asn 110	Ile	Arg
Asp Gln Pr 11	.5	-	120				125			
His Lys Tr 130		135				140				
Leu Ser Gl 145		150			155			(		160
Ser Met Hi	165			170					175	
Ala Leu Ly	180		18	85				190		
Ser Gln Gl 19	5		200				205			
Phe Leu Ly 210		215			:	220				
Leu Asp Ar 225		230	·		235		•		•	240
Lys Phe Gl	245			250					255	
Ser Ser Se	260		20	65	•			270		•
Ser Ser Se 27	5		280				285			
Lys Lys Ar 290		295				300				
Glu Glu Ly 305		310			315					320
Ser Ser Hi	s His Asn 325		Lys A	la Lys 330	Glu .	Lys	Pro	Arg	Phe 335	Leu

Lys His Glu Ser Ser Arg Glu Asp Ser Lys Trp Ser His Ser Asp Ser 340 345 350 Asp Lys Lys Ser Arg Thr His Lys His Ser Pro Glu Lys Arg Gly Ser 355 360 365 Glu Arg Lys Glu Gly Ser Ser Arg Ser His Gly Arg Glu Glu Arg Ser 370 375 380 Arg Arg Ser Arg Ser Arg Ser Pro Gly Ser Tyr Lys Gln Arg Glu Thr 385 390 395 400 Arg Lys Arg Ala Gln Arg Asn Pro Gly Glu Glu Gln Ser Arg Arg Asn 405 410 415 Asp Ser Arg Ser His Gly Thr Asp Leu Tyr Arg Gly Glu Lys Met Tyr 420 425 430 Arg Glu His Pro Gly Gly Thr His Thr Lys Val Thr Gln Arg Glu . 445 435 440 <210> 1721 <211> 177 .<212>' PRT <213> Homo sapiens <220> <221> SÌTE <222> (98) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (134) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (148) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (171) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (172) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1721 Met Val Gly Lys Ile Lys Arg Leu Lys Lys Ser Ala Phe Val Val Leu 1 5 10 15

Ile Leu Leu Ile Thr Ala Lys Leu Leu Val Leu Pro Leu Leu Cys Arg 20 25 30

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Glu Met Val Glu Leu Leu Asp Lys Gly Asp Ser Val Val Asn His, Thr 35 40 · 45 Ser Leu Ser Asn Tyr Ala Phe Leu Tyr Gly Val Phe Pro Val Ala Pro 50 55 60 Gly Val Ala Ile Phe Ala Thr Gln Phe Asn Met Glu Val Glu Ile Ile 70 65 75 · 80 Thr Ser Gly Met Val Ile Ser Thr Phe Val Ser Ala Pro Ile Met Tyr 85 90 95 Val Xaa Ala Trp Leu Leu Thr Phe Pro Thr Met Asp Pro Lys Pro Leu 100 105 110 Ala Tyr Ala Ile Gln Asn Val Ser Phe Asp Ile Ser Ile Val Ser Leu 115 120 125 Ile Ser Leu Ile Trp Xaa Leu Ala Ile Leu Leu Leu Ser Lys Lys Tyr 130 135 140 Lys Gln Leu Xaa His Met Leu Thr Thr Asn Leu Leu Ile Ala Gln Ser 145 150 . 155 160 Ile Val Cys Ala Gly Met Met Ile Trp Asn Xaa Xaa Lys Glu Lys Asn 165 170 175 Phe <210> 1722 <211> 227 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (171) <223> Xaa equals any of the naturally occurring L-amino acids · . . <400> 1722 Met Val Gly Lys Ile Lys Arg Leu Lys Lys Ser Ala Phe Val Val Leu 1 5 10 15 Ile Leu Leu Ile Thr Ala Lys Leu Leu Val Leu Pro Leu Leu Cys Arg 20 25 30 Glu Met Val Glu Leu Leu Asp Lys Gly Asp Ser Val Val Asn His Thr 40 35 45 Ser Leu Ser Asn Tyr Ala Phe Leu Tyr Gly Val Phe Pro Val Ala Pro 50 55 60 Gly Val Ala Ile Phe Ala Thr Gln Phe Asn Met Glu Val Glu Ile Ile 65 70 75 : 80

Thr Ser Gly Met Val Ile Ser Thr Phe Val Ser Ala Pro Ile Met Tyr 85 90 95

Val Ser Ala Trp Leu Leu Thr Phe Pro Thr Met Asp Pro Lys Pro Leu 100 . 105 110 Ala Tyr Ala Ile Gln Asn Val Ser Phe Asp Ile Ser Ile Val Ser Leu 115 120 125 Ile Ser Leu Ile Trp Ser Leu Ala Ile Leu Leu Leu Ser Lys Lys Tyr 130 135 140 Lys Gln Leu Pro His Met Leu Thr Thr Asn Leu Leu Ile Ala Gln Ser 145 150 155 160 Ile Val Cys Ala Gly Met Met Ile Trp Asn Xaa Val Lys Glu Lys Asn 165 170 175 Phe Val Gly Gln Ile Leu Val Phe Val Leu Leu Tyr Ser Ser Leu Tyr 180 185 190 Ser Thr Tyr Leu Trp Thr Gly Leu Leu Ala Ile Ser Leu Phe Leu Leu 195 200 -205 Lys Lys Arg Glu Arg Val Gln Ile Pro Val Gly Ile Ile Ile Ser 210 · 215 220 Gly Trp Gly 225 <210> 1723 <211> 227 <212> PRT <213> Homo sapiens <400> 1723 Met Val Gly Lys Ile Lys Arg Leu Lys Lys Ser Ala Phe Val Val Leu 1 5 10 15 Ile Leu Leu Ile Thr Ala Lys Leu Leu Val Leu Pro Leu Leu Cys Arg 20 25 30 . Glu Met Val Glu Leu Leu Asp Lys Gly Asp Ser Val Val Asn His Thr 35 40 45 . Ser Leu Ser Asn Tyr Ala Phe Leu Tyr Gly Val Phe Pro Val Ala Pro 50 55 60 Gly Val Ala Ile Phe Ala Thr Gln Phe Asn Met Glu Val Glu Ile Ile 65 70 80 Thr Ser Gly Met Val Ile Ser Thr Phe Val Ser Ala Pro Ile Met Tyr 85 90 95 Val Ser Ala Trp Leu Leu Thr Phe Pro Thr Met Asp Pro Lys Pro Leu 100 105 110 Ala Tyr Ala Ile Gln Asn Val Ser Phe Asp Ile Ser Ile Val Ser Leu 115 120 125

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Ile Ser Leu Ile Trp Ser Leu Ala Ile Leu Leu Leu Ser Lys Lys Tyr 130 135 140 . Lys Gln Leu Pro His Met Leu Thr Thr Asn Leu Leu Ile Ala Gln Ser 150 155 145 160 Ile Val Cys Ala Gly Met Met Ile Trp Asn Phe Val Lys Glu Lys Asn 165 170 175 Phe Val Gly Gln Ile Leu Val Phe Val Leu Leu Tyr Ser Ser Leu Tyr 180 190 Ser Thr Tyr Leu Trp Thr Gly Leu Leu Ala Ile Ser Leu Phe Leu Leu 195 200 205 Lys Lys Arg Glu Arg Val Gln Ile Pro Val Gly Ile Ile Ile Ser 210 215 220 Gly Trp Gly 225 <210> 1724 <211> 87 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (61) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (82) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1724 Met Gln Trp Arg Ala Leu Val Leu Gly Leu Val Leu Leu Arg Leu Gly 1 5 10 15 Leu His Gly Val Leu Trp Leu Val Phe Gly Leu Gly Pro Ser Met Gly 20 25 ·30 Phe Tyr Gln Arg Phe Pro Leu Ser Phe Gly Phe Gln Arg Leu Arg Ser 35 40 45 Pro Asp Gly Pro Ala Ser Pro Thr Phe Gly Ala Arg Xaa Pro Ala Trp 50 55 60 Gly Gly Ile Arg Ala Val Val Ala Cys Asn Arg Arg Gly Thr Gly Gln 65 70 . 75 80 ς. Arg Xaa Thr Arg Ala Lys Leu 85

<210> 1725

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·	Leu	His	Gly	Val 20	Leu	Trp	Leu	Val	Phe 25	Gly	Leu	Gly	Pro	Ser 30	Met	Gly
	Phe	Tyr	Gln 35	Arg	Phe	Pro	Leu	Ser 40	Phe	Gly	Phe	Gln	Arg 45	Leu	Arg	Ser
	Pro	Asp 50	Gly	Pro	Ala	Ser	Pro 55	Thr	Ser	Gly	Pro	Val 60	Gly	Arg	Pro	Gly
	Gly 65	Val	Ser	Gly	Pro	Ser 70	Trp	Leu	Gln	Pro	Pro 75	Gly	Thr	Gly	Ala	Ala 80
	Gln	Ser	Pro	Arg	Lys 85	Ala	Pro	Arg	Arg	Pro 90	Gly	Pro	Gly	Met	Cys 95	Gly
	Pro	Ala	Asn	Trp 100	Gly	Tyr	Val	Leu	Gly 105	Gly	Arg	Gly	Arg	Gly 110	Pro	Asp
	Glu	Tyr	Glu 115	Lys	Arg	Týr	Ser	Gly 120	Ala	Phe	Pro	Pro	Gln 125	Leu	Arg	Ala ,
	Gln	Met 130	Arg	Asp	Leu	Ala	Arg 135	Gly	Met	Phe	Val	Phe 140	Gly	Tyr	Asp	Asn
	Tyr 145	Met	Ala	His	Ala	Phe 150	Pro	Gln	Asp	Glu	Leu 155	Asn	Pro	Ile	His	Cys 160
	Arg	Gly	Arg	Gly	Pro 165	Asp	Arg	Gly	Asp 、	Pro 170	Ser	Asn	Leu	Asn	Ile 175	Asn
	Asp	Val '	Leu	Gly 180	Asn	Tyr	Ser	Leu	Thr 185	Leu	Val	Asp	Ala	Leu 190	Asp	Thr
	Leu	Ala	Ile 195	Met	Gly	Asn	Ser	Ser 200	Glu	Phe	Gln	Lys	Ala 205	Val	Lys	Leu
	Val	Ile 210	Asn	Thr	Val	Ser	Phe 215	Asp	Lys	Asp	Ser	Thr 220	Val	Gln	Val	Phe
	225					230					235				Arg	240
					245					250		_			Asp 255	
				260		•			265					270-	Leu -	
	Pro	Ala	Phe 275	Glu	Asn	Thr	Lys	Thr 280	Gly	Ile	Pro	Tyr	Pro 285	Arg	Val	Asn
		290					295					300			Thr	
	305					310					315				Leu	320
	Gly	Asp	Ser	Thr	Phe 325	Glu	Trp	Val		Arg 330 091	Arg	Ala	Val	Lys	Ala 335	Leu
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Trp Asn Leu Arg Ser Asn Asp Thr Gly Leu Leu Gly Val Ala Pro Phe-340 345 350 Leu Ala Ile Gly Thr Ala His Cys Leu Val Pro Phe Ser Phe His Leu 355 360 365 Leu Trp Ala Leu Pro Pro Phe Tyr Ser Ser Thr Gln Leu Thr Thr Gln 370 375 380 Gln Glu Leu Cys Gln Leu Tyr Leu Ile Ser Leu Cys Asp Pro Leu Gln 385 390 395 400 Arg Gly Cys Met Val 405 -. • <210> 1727 <211> 120 <212> PRT <213> Homo sapiens • . <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids • ` <220> <221> SITE <222> (120) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1727 Met Ile Leu Trp Leu Asp Trp Ala Leu Phe Leu Leu Val Phe Pro Gly 1 . 5 10 15 Gln Phe Phe Cys Trp Phe Cys Leu Gly Ser Leu Met Arg Leu Gln Val 20 25 30 Ala Ala Gly Ser Ala Ser Val Trp Gly Ser Ala Gly Met Thr Trp Pro . 40 - 35 45 Leu Ser Ala Cys Gly Pro Leu Ser Ser Met Met Val Ser Gly Phe Gln 50 55 60 Ala Ser Lys Pro Gln Cys Thr Ser Ile Tyr Pro Ala Phe Ala Cys Ile 75 65 70 80 Ala Leu Ala His Val Ser Leu Ala Lys Thr Asp His Val Ala Lys Leu 85 90 95 Arg Val Ser Val Gly Arg Val Tyr Thr Ser Ala Trp Ile Leu Lys Gly 100 105 . 110 Met Ile His Xaa Gly Pro Leu Xaa 115 120

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<210> 1728 <211> 53 <212> PRT <213> Homo sapiens · -. <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1728 Lys Tyr Ser Tyr Cys Ser His Leu His Phe Xaa Met Asn Glu Ser Ala 1 5 10 15 Leu Phe Cys Ser Asn Phe His Trp Lys Pro Val Gly Ser Glu Arg Leu 20 25 30 Trp Pro Pro Leu Ile Ile Tyr Asp Leu Lys Pro Ala Cys Asn Arg Glu 35 40 45 Pro Leu Gln Ser Leu . 50 · <210> 1729 <211> 120 <212> PRT <213> Homo sapiens <400> 1729 Met Ile Leu Trp Leu Asp Trp Ala Leu Phe Leu Leu Val Phe Pro Gly 5 1 10 15 Gln Phe Phe Cys Trp Phe Cys Leu Gly Ser Leu Met Arg Leu Gln Val 20 25 30 ( Ala Ala Gly Ser Ala Ser Val Trp Gly Ser Ala Gly Met Thr Trp Pro 35 40 45 Leu Ser Ala Cys Gly Pro Leu Ser Ser Met Met Val Ser Gly Phe Gln 50 55 • 60 Ala Ser Lys Pro Gln Cys Thr Ser Ile Tyr Pro Ala Phe Ala Cys Ile 65 70 75 80 Ala Leu Ala His Val Ser Leu Ala Lys Thr Asp His Val Ala Lys Leu 👘 85 90 95 . Arg Val Ser Val Gly Arg Val Tyr Thr Ser Ala Trp Ile Leu Lys Gly 105 110 100 Met Ile His Trp Gly Pro Leu Leu 115 120

<210> 1730 <211> 485 <212> PRT

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<213> Homo sapiens <400> 1730 Met Leu Pro Thr Phe Leu Leu Met Asn Leu Leu Ser Leu Ala Gly Asp Val Ala Leu Gln Gln Leu Val His Leu Glu Gln Ala Val Ser Gly Glu Leu Cys Arg Arg Arg Val Leu Arg Glu Glu Gln Glu His Lys Thr Lys Asp Pro Lys Glu Lys Asn Thr Ser Ser Glu Thr Thr Met Glu Glu Glu Leu Gly Leu Val Gly Ala Thr Ala Asp Asp Thr Glu Ala Glu Leu Ile Arg Gly Ile Cys Glu Met Glu Leu Leu Asp Gly Lys Gln Thr Leu Ala Ala Phe Val Pro Leu Leu Lys Val Cys Asn Asn Pro Gly Leu Tyr 100 . 105 110 Ser Asn Pro Asp Leu Ser Ala Ala Ala Ser Leu Ala Leu Gly Lys Phe Cys Met Ile Ser Ala Thr Phe Cys Asp Ser Gln Leu Arg Leu Leu Phe Thr Met Leu Glu Lys Ser Pro Leu Pro Ile Val Arg Ser Asn Leu Met 155 . 1,60 · 150 Val Ala Thr Gly Asp Leu Ala Ile Arg Phe Pro Asn Leu Val Asp Pro Trp Thr Pro His Leu Tyr Ala Arg Leu Arg Asp Pro Ala Gln Gln Val Arg Lys Thr Ala Gly Leu Val Met Thr His Leu Ile Leu Lys Asp Met Val Lys Val Lys Gly Gln Val Ser Glu Met Ala Val Leu Leu Ile Asp Pro Glu Pro Gln Ile Ala Ala Leu Ala Lys Asn Phe Phe Asn Glu Leu Ser His Lys Gly Asn Ala Ile Tyr Asn Leu Leu Pro Asp Ile Ile Ser Arg Leu Ser Asp Pro Glu Leu Gly Val Glu Glu Glu Pro Phe His Thr Ile Met Lys Gln Leu Leu Ser Tyr Ile Thr Lys Asp Lys Gln Thr Glu Ser Leu Val Glu Lys Leu Cys Gln Arg Phe Arg Thr Ser Arg Thr Glu .

Arg Gln Gln Arg Asp Leu Ala Tyr Cys Val Ser Gln Leu Pro Leu Thr Glu Arg Gly Leu Arg Lys Met Leu Asp Asn Phe Asp Cys Phe Gly Asp Lys Leu Ser Asp Glu Ser Ile Phe Ser Ala Phe Leu Ser Val Val Gly Lys Leu Arg Arg Gly Ala Lys Pro Glu Gly Lys Ala Ile Ile Asp Glu Phe Glu Gln Lys Leu Arg Ala Cys His Thr Arg Gly Leu Asp Gly Ile Lys Glu Leu Glu Ile Gly Gln Ala Gly Ser Gln Arg Ala Pro Ser Ala Lys Lys Pro Ser Thr Gly Ser Arg Tyr Gln Pro Leu Ala Ser Thr Ala Ser Asp Asn Asp Phe Val Thr Pro Glu Pro Arg Arg Thr Thr Arg Arg His Pro Asn Thr Gln Gln Arg Ala Ser Lys Lys Pro Lys Val Val Phe Ser Ser Asp Glu Ser Ser Glu Glu Asp Leu Ser Ala Glu Met Thr Glu Asp Glu Thr Pro Lys Lys Thr Thr Pro Ile Leu Arg Ala Ser Ala · 475 Arg Arg His Arg Ser .

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<210> 1731 <211> 485 <212> PRT <213> Homo sapiens

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<400> 1731 Met Leu Pro Thr Phe Leu Leu Met Asn Leu Leu Ser Leu Ala Gly Asp 15 · Val Ala Leu Gln Gln Leu Val His Leu Glu Gln Ala Val Ser Gly Glu Leu Cys Arg Arg Arg Val Leu Arg Glu Glu Gln Glu His Lys Thr Lys Asp Pro Lys Glu Lys Asn Thr Ser Ser Glu Thr Thr Met Glu Glu Glu Leu Gly Leu Val Gly Ala Thr Ala Asp Asp Thr Glu Ala Glu Leu Ile . Arg Gly Ile Cys Glu Met Glu Leu Leu Asp Gly Lys Gln Thr Leu Ala

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	Ala	Phe	Val	Pro 100	Leu	Leu	Leu	Lys	Val 105	Cys	Asn	Asn	Pro	Gly 110	Leu	Tyr
•	Ser	Asn	Pro 115	Asp	Leu	Ser	Ala	Ala 120	Ala	Ser	Leu	Ala	Leu 125	Gly	Lys	Phe
	Çys	Met 130	Ile ,	Ser	Ala	Thr	Phe 135	Суз	Asp	Ser	Gln	Leu 140	Arg	Leu	Leu	Phe
	Thr 145	Met	Leu	Glu	Lys	Ser 150	Pro	Leu	Pro	Ile	Val 155	Arg	Ser	Asn	Leu	Met 160
•	Val	Ala	Thr	Cly	Asp 165	Leu	Ala	Ile	Arg	Phe 170	Pro	Asn	Leu	Val	Asp 175	Pro
	Trp	Thr	Pro	His 180	Leu	Tyr	Ala	Arg	Leu 185	Arg	Asp	Pro	Ala	Gln 190	Gln	Val
	Arg	Lys	Thr 195	Ala	Gly	Leu	Val	Met 200	Thr	His	Leu	Ile	Leu 205	Lys	Asp	Met
-	Val	Lys 210	Val	Lys	Gly	Gln	Val 215	Ser	Glu	Met	Ala	Val 220	Leu	Leu	Ile	Asp
	Pro 225	Glu	Pro	Gln	Ile	Ala 230	Ala	Leu	Ala	Lys	Asn 235	Phe	Phe	Asn	Glu	Leu 240
	Ser	His	Lys	Gly	Asn 245	Ala	Ile	Tyr	Asn	Leu 250	Leu	Pro	Asp	lle	Ile 255	
	Arg	Leu	Ser	Asp 260	Pro	Glu	Leu	Gly	Val 265	Glu	Glu	Glu	Pro	Phe 270	His	Thr
	Ile	Met	Lys 275	Gln	Leu	Leu	Ser	Tyr 280	Ile	Thr	Lys	Asp	Lys 285	Gln	Thr	Glu
	Ser	Leu 290	Val	Glu	Lys	Leu	Cys 295	Gln	Arg	Phe	Arg	Ţhr 300	Ser	Arg	Thr	Glu
	Arg 305	Gln	Gln	Arg		Leu 310	Ala -	Tyr	Cys	Val	Ser 315	Gln	Leu	Pro	Leu	Thr 320
	Glu	Arg	Gly	Leu	Arg 325	Lys	Met	Leu.	Asp	Asn 330	Phe	Asp	Cys	Phe	Gly 335	Asp
	Lys	Leu	Ser	Asp 340	Glu	Ser	Ile	Phe	Ser 345		Phe	Leu	Ser	Val 350	Val	Gly
	Lys	Leu	Arg 355	Arg	Gly	Ala	Lys	Pro 360	Glu	Gly	Lys	Ala	Ile 365	Ile	Asp	Glu
•	Phe	Glu 370	Gln	Lys	Leu	Arg	Ala 375	Cys	His	Thr	Arg	Gly 380	Leu	Asp	Gly	Ile
	Lys 385	Glu	Leu	Glu	Ile	Gly 390	Gln	Ala	Gly	Ser	Gln 395	Arg	Ala	Pro	Ser	Ala 400
	Lys	Lys	Pro	Ser	Thr	Gly	Ser	Arg	Tyr		Pro	Leu	Ala	Ser	Thr	Ala
					•				1(	096						

· 415 Ser Asp Asn Asp Phe Val Thr Pro Glu Pro Arg Arg Thr Thr Arg Arg His Pro Asn Thr Gln Gln Arg Ala Ser Lys Lys Lys Pro Lys Val Val Phe Ser Ser Asp Glu Ser Ser Glu Glu Asp Leu Ser Ala Glu Met Thr Glu Asp Glu Thr Pro Lys Lys Thr Thr Pro Ile Leu Arg Ala Ser Ala Arg Arg His Arg Ser · . . <210> 1732 <211> 485 <212> PRT <213> Homo sapiens <400> 1732 Met Leu Pro Thr Phe Leu Leu Met Asn Leu Leu Ser Leu Ala Gly Asp Val Ala Leu Gln Gln Leu Val His Leu Glu Gln Ala Val Ser Gly Glu Leu Cys Arg Arg Arg Val Leu Arg Glu Glu Glu Glu His Lys Thr Lys Asp Pro Lys Glu Lys Asn Thr Ser Ser Glu Thr Thr Met Glu Glu Glu 50 55 Leu Gly Leu Val Gly Ala Thr Ala Asp Asp Thr Glu Ala Glu Leu Ile . 65 Arg Gly Ile Cys Glu Met Glu Leu Leu Asp Gly Lys Gln Thr Leu Ala Ala Phe Val Pro Leu Leu Lys Val Cys Asn Asn Pro Gly Leu Tyr · 110 Ser Asn Pro Asp Leu Ser Ala Ala Ala Ser Leu Ala Leu Gly Lys Phe 115-• -Cys Met Ile Ser Ala Thr Phe Cys Asp Ser Gln Leu Arg Leu Leu Phe Thr Met Leu Glu Lys Ser Pro Leu Pro Ile Val Arg Ser Asn Leu Met 150 . Val Ala Thr Gly Asp Leu Ala Ile Arg Phe Pro Asn Leu Val Asp Pro Trp Thr Pro His Leu Tyr Ala Arg Leu Arg Asp Pro Ala Gln Gln Val 

Arg Lys Thr Ala Gly Leu Val Met Thr His Leu Ile Leu Lys Asp Met . 200 195 205 . Val Lys Val Lys Gly Gln Val Ser Glu Met Ala Val Leu Leu Ile Asp 210 215 220 Pro Glu Pro Gln Ile Ala Ala Leu Ala Lys Asn Phe Phe Asn Glu Leu 225 · 230 235 Ser His Lys Gly Asn Ala Ile Tyr Asn Leu Leu Pro Asp Ile Ile Ser 245 250 255 Arg Leu Ser Asp Pro Glu Leu Gly Val Glu Glu Glu Pro Phe His Thr 270 260 265 Ile Met Lys Gln Leu Leu Ser Tyr Ile Thr Lys Asp Lys Gln Thr Glu 275 280 285 Ser Leu Val Glu Lys Leu Cys Gln Arg Phe Arg Thr Ser Arg Thr Glu • 290 295 300 Arg Gln Gln Arg Asp Leu Ala Tyr Cys Val Ser Gln Leu Pro Leu Thr 305 310 315 320 Glu Arg Gly Leu Arg Lys Met Leu Asp Asn Phe Asp Cys Phe Gly Asp 330 325 335 Lys Leu Ser Asp Glu Ser Ile Phe Ser Ala Phe Leu Ser Val Val Gly 340 345 350 Lys Leu Arg Arg Gly Ala Lys Pro Glu Gly Lys Ala Ile Ile Asp Glu , 355 360 365 Phe Glu Gln Lys Leu Arg Ala Cys His Thr Arg Gly Leu Asp Gly Ile 370 • 375 380 Lys Glu Leu Glu Ile Gly Gln Ala Gly Ser Gln Arg Ala Pro Ser Ala 385 390 395 400 Lys Lys Pro Ser Thr Gly Ser Arg Tyr Gln Pro Leu Ala Ser Thr Ala 405 410 415 Ser Asp Asn Asp Phe Val Thr Pro Glu Pro Arg Arg Thr Thr Arg Arg 420 425 430 His Pro Asn Thr Gln Gln Arg Ala Ser Lys Lys Pro Lys Val Val . 435 440 445 Phe Ser Ser Asp Glu Ser Ser Glu Glu Asp Leu Ser Ala Glu Met Thr 450 . 455 460 Glu Asp Glu Thr Pro Lys Lys Thr Thr Pro Ile Leu Arg Ala Ser Ala 465 470 475 480 Arg Arg His Arg Ser 485 .

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<210> 1733 <211> 65 <212> PRT <213> Homo sapiens <400> 1733 Met Val Val Thr Thr Glu Pro Leu Thr Gln Ala Val Val Asp Lys Thr 1 . 5 10 15 Leu Leu Val Val Leu Leu Cly Val Thr Leu Phe Ile Thr Val 20 25 30 . Leu Val Leu Phe Ala Leu Gln Ala Tyr Glu Ser Tyr Lys Lys Asp . 35 40 . 45 Tyr Thr Gln Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser Glu · · · 50 55 60 Met 65 <210> 1734 <211> 65 <212> PRT <213> Homo sapiens <400> 1734 Met Val Val Thr Thr Glu Pro Leu Thr Gln Ala Val Val Asp Lys Thr 1 5 10 15 Leu Leu Val Val Leu Leu Cly Val Thr Leu Phe Ile Thr Val - 20 25 30 Leu Val Leu Phe Ala Leu Gln Ala Tyr Glu Ser Tyr Lys Lys Asp ·35 40 . 45 Tyr Thr Gln Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser Glu · 50 55 60 Met 65 <210> 1735 <211> 342 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (150) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (271) . <223> Xaa equals any of the naturally occurring L-amino acids

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305	310	315	320
Tyr Lys Lys Lys Asp 325	Tyr Thr Gln Va	al Asp Tyr Leu Ile . 330	Asn Gly Met 335
Tyr Ala Asp Ser Glu 340	Met	· · ·	
<210> 1736 <211> 96 <212> PRT <213> Homo sapiens	· -	·	
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<400> 1736			
Met Thr Leu Pro Thr 1 5	Ser Gln Cys Le	eu Ile Cys Leu Leu ( 10	Gln Ala Leu 15
Cys Gly Ile Gly His 20		a Trp Gly Ser Asn ( 5	Gln Val Leu 30
Phe Pro Gly Gly Gln 35	Gln Glu Asp Gl 40	y Gly Cys Gln Arg : 45	Ile Pro Asp
Pro Ser Phe Leu Ser 50	Thr Pro Cys Gl 55	y Lys Gln Gly Gly 1 60	His Ala Glu
Gln Glu Leu Gln Gln 65	Cys Trp Gly Al 70	a Phe Xaa Gln Leu 1 75	Pro Gly Cys 80
Val Leu His Phe His 85	Pro Gly Val Le	u His Lys Ala His S 90	Ser Glu Trp 95
	. '.		· ·
			•
<210> 1737 <211> 79 <212> PRT <213> Homo sapiens	· · · ·		
<400> 1737			
Gly Leu Gly Pro Gly 1 5	Ile Pro Met Cy	s Phe Gln Gln Trp 1 10	Thr Thr Cys 15
Ser Glu Val Leu Val 20		o Val Ser Val Val A 5	Asp Lys Thr 30
Asp Gly Arg Phe Arg 35	Gly Ser Thr Pr 40	o His Thr Cys Lys I 45	eu Asp Arg
Ala Gln Lys Leu Val	Lys Asp Ile Tr	p Arg Cys Cys Ala G	Sly Gln Phe

50 55 60 Ala Pro Leu Ser Leu Arg Ser Met Val Phe His Asn Ala Pro Ile 65 70 75 <210> 1738 <211> 96 <212> PRT <213> Homo sapiens · <400> 1738 Met Thr Leu Pro Thr Ser Gln Cys Leu Ile Cys Leu Leu Gln Ala Leu 1 5. 10 15 -Cys Gly Ile Gly His Gly Ala Leu Ala Trp Gly Ser Asn Gln Val Leu 20 25 30 Phe Pro Gly Gly Gln Gln Glu Asp Gly Gly Cys Gln Arg Ile Pro Asp 35 40 45 . Pro Ser Phe Leu Ser Thr Pro Cys Gly Lys Gln Gly Gly His Ala Glu 50 55 60 Gln Glu Leu Gln Gln Cys Trp Gly Ala Phe Cys Gln Leu Pro Gly Cys 65 70 75 80 Val Leu His Phe His Pro Gly Val Leu His Lys Ala His Ser Glu Trp 85 90 95 <210> 1739 <211> 162 <212> PRT <213> Homo sapiens <220> . <221> SITE <222> (134) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (142) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (154) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (161)

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Pro Pro Glu Pro Pro Ser Pro Trp Ser Asp Ile Arg Asn Ala Thr Gln 100 105 110 Phe Ala Pro Val Cys Pro Gln Asn Ile Ile Asp Gly Arg Leu Pro Glu 115 120 125 Val Met Leu Pro Val Trp Phe Thr Asn Asn Leu Asp Val Val Ser Ser 130 135 140 Tyr Val Gln Asp Gln Ser Glu Asp Cys Leu Tyr Leu Asn Ile Tyr Val 145 • • . 150 155 160 Pro Thr Glu Asp Asp Ile Arg Asp Ser Gly Gly Pro Lys Pro Val Met 165 170 175 Val Tyr Ile His Gly Gly Ser Tyr Met Glu Gly Thr Gly Asn Leu Tyr 180 185 190 Asp Gly Ser Val Leu Ala Ser Tyr Gly Asn Val Ile Val Ile Thr Val 195 . 200 205 .. Asn Tyr Arg Leu Gly Val Leu Gly Lys Lys Ser Leu Ser Phe Val Phe 210 215 220 Thr Met Asn Pro 225 · <210> 1741 <211> 94 <212> PRT <213> Homo sapiens <400> 1741 Met Leu Pro Thr Leu Thr Ala Pro Thr Leu Ala Leu Leu Leu Pro 1 5 10 15 Lys Ile Ser Cys Leu Leu Thr Ser Thr His Pro Arg Thr Gln Gly Ser 20 25 30 Arg Ala His Phe Pro Arg Ala Trp Arg Leu Asp Pro Gly Glu Phe Leu 35 . 40 45 . His Pro Leu Gln Asp Pro His Ser Ser Pro Leu Trp Ser Leu Asp His 50 55 . 60 Arg Trp Arg Trp Pro Glu Leu Thr Cýs Trp Leu Trp Gly His Ser Ser 65 70 75 80 Cys Trp Pro Arg Met Arg Arg Gly Thr Arg Glu Tyr Lys Gly 85 90 . · <210> 1742 <211> 94 <212> PRT <213> Homo sapiens

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· · <400> 1742 Met Leu Pro Thr Leu Thr Ala Pro Thr Leu Ala Leu Leu Leu Pro 1 5 10 15 Lys Ile Ser Cys Leu Leu Thr Ser Thr His Pro Arg Thr Gln Gly Ser 20 25 30 Arg Ala His Phe Pro Arg Ala Trp Arg Leu Asp Pro Gly Glu Phe Leu .35 40 45 His Pro Leu Gln Asp Pro His Ser Ser Pro Leu Trp Ser Leu Asp His 50 55 60 Arg Trp Arg Trp Pro Glu Leu Thr Cys Trp Leu Trp Gly His Ser Ser 65 70 75 80 Cys Trp Pro Arg Met Arg Arg Gly Thr Arg Glu Tyr Lys Gly 85 . 90 <210> 1743 <211> 5.7 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids · . <220> <221> SITE <222> (9) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1743 . Met Arg Thr Asp Tyr Pro Arg Xaa Xaa Arg Ser Cys Leu Cys Val Ser . 1 5 10 15 Leu Ser Pro Pro Leu Val Ser Lys Gly Ser His Arg Ser Arg Trp Leu . 20 . 25 30 Arg Thr Met Ala Val Pro Ala Gly Thr Gln Val Trp Arg Gln Asp Leu 35 . 40 45 Gln Pro Leu Gly Ala Val Leu Leu Gln 50 . 55 ' . . <210> 1744 <211> 123 <212> PRT <213> Homo sapiens <400> 1744 Met Arg Thr Asp Tyr Pro Arg Ser Val Leu Ala Pro Ala Tyr Val Ser 1 5 10 15 \_ 1105 <sup>.</sup>

Val Cys Leu Leu Leu Cys Pro Arg Glu Val Ile Ala Pro Ala Gly 20 25 30 Ser Glu Pro Trp Leu Cys Gln Pro Ala Pro Arg Cys Gly Asp Lys Ile · 35 40 45 Tyr Asn Pro Leu Glu Gln Cys Cys Tyr Asn Asp Ala Ile Val Ser Leu · 50 55 60 Ser Glu Thr Arg Gln Cys Gly Pro Pro Cys Thr Phe Trp Pro Cys Phe 65 70 75 80 Glu Leu Cys Cys Leu Asp Ser Phe Gly Leu Thr Asn Asp Phe Val Val 85 90 95 Lys Leu Lys Val Gln Gly Val Asn Ser Gln Cys His Ser Ser Pro Ile 100 105 110 Ser Ser Lys Cys Glu Ser Arg Arg Arg Phe Pro 115 120 <210> 1745 <211> 107 <212> PRT <213> Homo sapiens <400> 1745 Met His Pro Leu Pro Cys Leu His Leu Trp Glu Phe Phe Leu Ser Glu 1 5 . 10 . 15 Trp Gly Gln Phe Leu Ala Gln Gly Ser Glu Leu Arg Gln Pro Gln Gly 20 25 30 . Arg Gly Pro Tyr Leu Leu Ser Ser Val Leu Gly Tyr Arg Glu Gln Pro 35 . 40 45 Gly Asp Ser Leu Val Pro Pro Pro Trp Arg Val Ser Leu Thr His Ser 50 55 60 Pro Ser Leu Arg Ala Ser Trp Pro Thr Ala Ser Leu Trp Glu Ser Gly 75 80 65 70 . Arg Arg Ala Arg Trp Val Ala Gly Ala Arg Leu Leu Ser Pro Pro Pro 85 90 95 Ala Asp Phe Leu Leu Leu Pro Leu Ile Pro Phe . 100 105 <210> 1746

<211> 107 <212> PRT <213> Homo sapiens

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<400> 1746 Met His Pro Leu Pro Cys Leu His Leu Trp Glu Phe Phe Leu Ser Glu

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1 5 10 15 Trp Gly Gln Phe Leu Ala Gln Gly Ser Glu Leu Arg Gln Pro Gln Gly 20 25 30 Arg Gly Pro Tyr Leu Leu Ser Ser Val Leu Gly Tyr Arg Glu Gln Pro 35 40 45 Gly Asp Ser Leu Val Pro Pro Pro Trp Arg Val Ser Leu Thr His Ser 50 55 60 Pro Ser Leu Arg Ala Ser Trp Pro Thr Ala Ser Leu Trp Glu Ser Gly 75 65 <sub>.</sub> . 70 80 Arg Arg Ala Arg Trp Val Ala Gly Ala Arg Leu Leu Ser Pro Pro Pro . 85 90 95 Ala Asp Phe Leu Leu Leu Pro Leu Ile Pro Phe ·105 100 <210> 1747 <211> 120 <212> PRT <213> Homo sapiens <400> 1747 Met Ala Gly Tyr Gln Lys His His Gly Ser Phe Ala Ile Cys Cys Leu 1. 5. 10 15 Phe Ser Ala Leu Ser Leu Thr Leu Ser Phe Gln Glu Gly Glu Asn Glu 20 25 30 Cys Phe Pro Ala Phe Ser Val Leu Cys Ser Lys Glu Glu Ser Arg Cys 35 40 . 45 Trp Leu Pro Asn Leu Pro Tyr Phe Leu Ile Ala Val Arg Gly Ile Asn 55 50 60 . • Cys Met Phe Pro Glu Gly Lys Gly Trp Leu Thr Asp Leu Leu Glu Gly 65<sup>.</sup> 70 75 80 Ile Leu Ser Val Glu Ala Gly Gln Glu Asn Pro Gly Ile Ser Phe Ala 85 90 . 95 Gly Phe Cys Ala Val Pro Leu Pro Ser Ser Cys Leu Lys Cys Glu Tyr 100 105 . 110 Cys Phe Pro Ala Phe Gln Arg Trp · 120 115

<210> 1748 <211> 62 <212> PRT <213> Homo sapiens

<220>

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<221> SITE <222> (23) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1748 Asp Val Leu Gln Ile Thr Phe Trp Trp Pro Leu Val Thr Ala Val Ser 1 • 5 10 15 Leu Gln Gly Leu Asn Lys Xaa Leu Ser Pro Ile Pro Phe His Thr Cys 20 25 30 Val Val Tyr Tyr Trp Gln Ala Ser Val Leu Arg Val Ser Asn Gly Thr 35 40 . 45 Asp Gly Cys Gln Thr Leu Trp Ile Ser Ala Ser Pro Gly Trp 50 55 60 <210> 1749 <211> 120 <212> PRT <213> Homo sapiens <400> 1749 Met Ala Gly Tyr Gln Lys His His Gly Ser Phe Ala Ile Cys Cys Leu 1 5 10 15 Phe Ser Ala Leu Ser Leu Thr Leu Ser Phe Gln Glu Gly Glu Asn Glu 20 25 30 . Cys Phe Pro Ala Phe Ser Val Leu Cys Ser Lys Glu Glu Ser Arg Cys 35 40 45 . Trp Leu Pro Asn Leu Pro Tyr Phe Leu Ile Ala Val Arg Gly Ile Asn 50 55 60 Cys Met Phe Pro Glu Gly Lys Gly Trp Leu Thr Asp Leu Leu Glu Gly 70 65 75 8.0 Ile Leu Ser Val Glu Ala Gly Gln Glu Asn Pro Gly Ile Ser Phe Ala - 85 • 90 95 Gly Phe Cys Ala Val Pro Leu Pro Ser Ser Cys Leu Lys Cys Glu Tyr 100 105 110 Cys Phe Pro Ala Phe Gin Arg Trp 115 120 . <210> 1750 <211> 105 <212> PRT <213> Homo sapiens <400> 1750 Met Asp Asp Phe Leu Phe Ser Val Ser Ile Leu Ser Gly Ile Leu Cys 1 5 10 15 . 1108

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Ser Ile Leu Ala Val Leu Lys Phe Met Leu Gly Lys Val Leu Thr Ser 20 25 30 Arg Ala Leu Ile Thr Asp Gly Phe Asn Ser Leu Val Gly Gly Val Met 35 40 45 Gly Phe Ser Ile Leu Leu Ser Ala Glu Val Phe Lys His Asp Ser Ala 50 55 60 Val Trp Tyr Leu Asp Gly Ser Ile Gly Val Leu Ile Gly Leu Thr Ile 65 70 75 80 Phe Ala Tyr Gly Val Lys Leu Leu Ile Asp Met Val Pro Arg Val Arg 90 85 95 Gln Thr Arg His Tyr Glu Met Phe Glu 100 105 <210> 1751 <211> 186 <212> PRT <213> Homo sapiens <220> <221> SITE . <222> (138) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (166) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1751 Met Leu Asp Lys Ile Ile Ser Ile Phe Ile Ile Phe Leu Leu Val Ile 1 5 . 10 15 Gly Thr Leu Leu Leu Ala Leu Leu Leu Thr Ala Lys Val His Gln Glu 20 25 30 •. Ser Val His Met Ile Glu Val Thr Ser Asn Leu Ile Asn Glu Thr Leu . 35 · 40 45 Ala Asn His Pro Glu Trp Ala Asn Trp Leu Pro Glu Ala Gln Val Val 50 55 60 Gln Arg Ala Leu Asn Ser Ala Ala Asn Asn Val Tyr Gln Tyr Gly Arg 65 70 75 Glu Trp Ile Thr His Lys Leu His Lys Ile Leu Gly Asp Lys Val Asn 85 90 95 Asn Thr Ala Val Ile Glu Lys Gln Val Leu Glu Leu Trp Asp Arg Leu 100 105 110 Tyr His Ser Trp Phe Val Lys Asn Val Thr His Ser Gly Arg His Lys · 115

1109

120

125

WO 01/77137 PCT/US01/11988 Gly Gln Lys Leu His Val Ser Arg Gln Xaa Ser Trp Leu Gly Asp Ile 130 135 140 Leu Asp Trp Gln Asp Ile Val Ser Phe Val His Glu Asn Ile Glu Thr 145 150 155<sup>.</sup> 160 Phe Leu Ser İle Leu Xaa Ser Leu Trp Ile Val Met Ser Leu Asn Val 165 170 175 Ser Leu Leu Pro Leu Ala Leu His Ser 180 185 <210> 1752 <211> 224 <212> PRT <213> Homo sapiens <400> 1752 Val Leu Ser Leu Ile Ile Phe Leu Thr Thr Leu Phe Tyr Leu Leu Ser 5 10 15 1 Ser Ser Asp Glu Tyr Tyr Lys Pro Val Lys Trp Val Ile Ser Leu Thr 20 25 30 Pro Leu Ser Gln Pro Gly Pro Ser Ser Asn Ile Ile Gly Gln Ser Val 35 40 45 Glu Glu Ala Ile Arg Gly Val Phe Asp Ala Ser Leu Lys Met Ala Gly 50 . 55 60 Phe Tyr Gly Leu Tyr Thr Trp Leu Thr His Thr Met Phe Gly Ile Asn 65 . . . 70 75 80 Ile Val Phe Ile Pro Ser Ala Leu Ala Ala Ile Leu Gly Ala Val Pro 85 90 Phe Leu Gly Thr Tyr Trp Ala Ala Val Pro Ala Val Leu Asp Leu Trp 100 105 . 110 Leu Thr Gln Gly Leu Gly Cys Lys Ala Ile Leu Leu Leu Ile Phe His 115 120 125 Leu Leu Pro Thr Tyr Phe Val Asp Thr Ala Ile Tyr Ser Asp Ile Ser 130 135 140 Gly Gly Gly His Pro Tyr Leu Thr Gly Leu Ala Val Ala Gly Gly Ala 145 150 155 1.60 Tyr Tyr Leu Gly Leu Glu Gly Ala Ile Ile Gly Pro Ile Leu Leu Cys-165 170 175 Ile Leu Val Val Ala Ser Asn Ile Tyr Ser Ala Met Leu Val Ser Pro 180 185 190 Thr Asn Ser Val Pro Thr Pro Asn Gln Thr Pro Trp Pro Ala Gln Pro 195 205 200 Gln Arg Thr Phe Arg Asp Ile Ser Glu Asp Leu Lys Ser Ser Val Gly

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210	215	220	
<210> 1753 <211> 424 <212> PRT			
<213> Homo sa <220> <221> SITE <222> (138) <223> Xaa emi		naturally occurring	L_amino acido
<220> <221> SITE		hacararry occurring	
<222> (183) <223> Xaa equ	uals any of the	naturally occurring	L-amino acids
<400> 1753	· .	Ile Phe Ile Ile Phe	
1	5	, 10 ·	15
Gly Thr Leu I	Leu Leu Ala Leu	Leu Leu Thr Ala Lys	Val His Gln Glu
	20	25	30,
Ser Val His M	Met Ile Glu Val	Thr Ser Asn Leu Ile	Asn Glu Thr Leu
35		40	45
Ala Asn His P	ro Glu Trp Ala	Asn Trp Leu Pro Glu	Ala,Gln Val Val
50	55	60	
Gln Arg Ala L	Leu Asn Ser Ala	Ala Asn Asn Val Tyr	Gln Tyr Gly Arg
65	70	75	80
Glu Trp Ile T	Thr His Lys Leu	His Lys Ile Leu Gly	Asp Lys Val Asn.
	85	90	95
	Jal Ile Glu Lys	.Gln Val Leu Glu Leu	Trp Asp Arg Leu
	100	105	110
Tyr His Ser I	Irp Phe Val Lys	Asn Val Thr His Ser	Gly Arg His Lys
115		120	125
Gly Gln Lys L	Leu His Val Ser	Arg Gln Xaa Ser Trp	Leu Gly Asp Ile
130	135	140	
Leu Asp Trp G	Gln Asp Ile Val	Ser Phe Val His Glu	Asn Ile Glu Thr
145	150	155	160
Phe Leu Ser I	Ile Leu Glu Ser	Leu Trp Ile Val Met	Ser Arg Asn Val
	165	170	175
	Phe Thr Thr Xaa	Thr Thr Leu Leu Thr	Ile Leu Phe Tyr
	180	185	190
Ser Gly Thr A	Ala Leu Leu Asn	Phe Val Leu Ser Leu	Ile Ile Phe Leu

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		195					200		•			205			
Thr	Thr 210	Leu	Phe	Tyr	Leu	Leu 215	Ser	Ser	Ser	Asp	Glu 220		Tyr	Lys	Pro
Val 225	Lys	Trp	Val	Ile	Ser 230	Leu	Thr	Pro	Leu	Ser 235	Gln	Pro	Gly	Pro	Ser 240
Ser	Asn	Ile	Ile	Gly 245	Gln	Ser	`Val	Glu	Glu 250	Ala	Ile	Arg	Gly	Val 255	Phe
Asp	Ala	Ser	Leu 260	Lys	Met	Ala	Gly	Phe 265	Tyr	Gly	Leu	Tyr	Thr 270	Trp	Leu
Thr	His	Thr 275	Met	Phe	Gly	Ile	Asn 280	Ile	Val	Phe	Ile	Pro 285	Ser	Ala	Leu
Ala	Ala 290	Ile	Leu	Gly	Ala	Val 295	Pro	Phe	Leu	Gly	Thr 300	Tyr	Trp	Ala	Ala
Val 305	Pro	Ala	Val	Leu	Asp 310	Leu	Trp	Leu	Thr	Gln 315	Gly	Leu	Gly	Cys	Lys 320
Ala	Iļe	Leu	Leu	Leu 325	Ile	Phe	His		Leu 330		Thr	Tyr	Phe	Val 335	Asp
Thr	Ala	Ile	Tyr 340	Ser	Asp	Ile	Ser	Gly 345	Gly	Gly	His	Pro	Tyr 350	Leu	Thr
Gly	Leu	Ala 355	Val	Ala	Gly	Gly	Ala 360	Tyr	Tyr	Leu	Gly	Leu 365	Glu	Gly	Ala
Ile	Ile 370	Gly	Pro	Ile	Leu	Leu 375	Cys	Ile	Leu	Val	Val 380	Ala	Ser	Asn	Ile
Tyr 385	Ser	Ala	Met	Leu	Val 390	Ser	Pro	Thr	Asn	Ser 395	Val	Pro	Thr	Pro	Asn 400
Gln	Thr	Pro	Trp	Pro 405	Ala	Gln	Pro	Gln	Arg 410	Thr	Phe	Arg	Asp	Ile 415	Ser
Glu	Asp	Leu	Lys 420	Ser	Ser	Val	Gly								
<212	.> 38 :> PR	15 IT .	apie	ens				•							

<400> 1754
Met Leu Asp Lys Ile Ile Ser Ile Phe Ile Ile Phe Leu Leu Val Ile
1
Gly Thr Leu Leu Leu Ala Leu Leu Leu Thr Ala Lys Val His Gln Glu
20
Ser Val His Met Ile Glu Val Thr Ser Asn Leu Ile Asn Glu Thr Leu
35

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Ala Asn His Pro Glu Trp Ala Asn Trp Leu Pro Glu Ala Gln Val Val 55 60 Gln Arg Ala Leu Asn Ser Ala Ala Asn Asn Val Tyr Gln Tyr Gly Arg 75. Glu Trp Ile Thr His Lys Leu His Lys Ile Leu Gly Asp Lys Val Asn Asn Thr Ala Val Ile Glu Lys Gln Val Leu Glu Leu Trp Asp Arg Leu . 100 Tyr His Ser Trp Phe Val Lys Asn Val Thr His Ser Gly Arg His Lys 115 120 125 Gly Gln Lys Leu His Val Ser Arg Gln Asn Ser Trp Leu Gly Asp Ile . Leu Asp Trp Gln Asp Ile Val Ser Phe Val His Glu Asn Ile Glu Thr . Phe Leu Ser Ile Leu Glu Ser Leu Trp Ile Val Met Ser Arg Asn Val . Ser Leu Leu Phe Thr Thr Val Thr Thr Leu Leu Thr Ile Leu Phe Tyr 1.90 Ser Gly Thr Ala Leu Leu Asn Phe Val Leu Ser Leu Ile Ile Phe Leu Thr Thr Leu Phe Tyr Leu Leu Ser Ser Ser Asp Glu Tyr Tyr Lys Pro . Val Lys Trp Val Ile Ser Leu Thr Pro Leu Ser Gln Pro Gly Pro Ser Ser Asn Ile Ile Gly Gln Ser Val Glu Glu Ala Ile Arg Gly Val Phe Asp Ala Ser Leu Lys Met Ala Gly Phe Tyr Gly Leu Tyr Thr Trp Leu Thr His Thr Met Phe Gly Ile Asn Ile Val Phe Ile Pro Ser Ala Leu Ala Ala Ile Leu Gly Ala Val Pro Phe Leu Gly Thr Tyr Trp Ala Ala . Val Pro Ala Val Leu Asp Leu Trp Leu Thr Gln Gly Leu Gly Cys Lys Ala Ile Leu Leu Met Ile Phe His Leu Leu Pro Thr Tyr Phe Val Asp . 325 Thr Ala Ile Tyr Ser Asp Ile Ser Gly Gly Gly His Pro Tyr Leu Thr ~ 345 Gly Leu Ala Val Ala Gly Gly Ser Ile Leu Pro Arg Pro Gly Arg Ser 

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Asn His Arg Ser Tyr Ser Ser Leu His Thr Cys Gly Cys Phe Gln Tyr 370 375 380 Leu 385 <210> 1755 <211> 293 <212> PRT <213> Homo sapiens . <400> 1755 Met Pro Tyr Val Thr Glu Ala Thr Arg Val Gln Leu Val Leu Pro Leu 1 5 10 15 Leu Val Ala Glu Ala Ala Ala Ala Pro Ala Phe Leu Glu Ala Phe Ala 20 25 30 Ala Asn Val Leu Glu Pro Arg Glu His Ala Leu Leu Thr Leu Leu ' **35** 40 45 Val Tyr Gly Pro Arg Glu Gly Gly Arg Gly Ala Pro Asp Pro Phe Leu 50 55 . . 60 . . Gly Val Lys Ala Ala Ala Ala Glu Leu Glu Arg Arg Tyr Pro Gly Thr 65 70 75 80 Arg Leu Ala Trp Leu Ala Val Arg Ala Glu Ala Pro Ser Gln Val Arg · · 85 、 90 95 Leu Met Asp Val Val Ser Lys Lys His Pro Val Asp Thr Leu Phe Phe 100 105 110 Leu Thr Thr Val Trp Thr Arg Pro Gly Pro Glu Val Leu Asn Arg Cys 115 120 . 125 Arg Met Asn Ala Ile Ser Gly Trp Gln Ala Phe Phe Pro Val His Phe 130 135 140 Gln Glu Phe Asn Pro Ala, Leu Ser Pro Gln Arg Ser Pro Pro Gly Pro 145 150 - 155 • 160 Pro Gly Ala Gly Pro Asp Pro Pro Ser Pro Pro Gly Ala Asp Pro Ser 165 170 175 Arg Gly Ala Pro Ile Gly Gly Arg Phe Asp Arg Gln Ala Ser Ala Glu 180 185 190 Gly Cys Phe Tyr Asn Ala Asp Tyr Leu Ala Ala Arg Ala Arg Leu Ala 195 200 205 Gly Glu Leu Ala Gly Gln Glu Glu Glu Glu Ala Leu Glu Gly Leu Glu 210 . 215 -220 Val Met Asp Val Phe Leu Arg Phe Ser Gly Leu His Leu Phe Arg Ala 225 230 235 240

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Val Glu Pro Gly Leu Val Gln Lys Phe Ser Leu Arg Asp Cys Ser Pro 245 250 255 Arg Leu Ser Glu Glu Leu Tyr His Arg Cys Arg Leu Ser Asn Leu Glu 260 . 265 . 270 Gly Leu Gly Gly Arg Ala Gln Leu Ala Met Ala Leu Phe Glu Gln Glu 275 280 285 Gln Ala Asn Ser Thr 290 .\_\_ · --<210> 1756 <211> 566 <212> PRT <213> Homo sapiens . <400> 1756 Met Gln Val Val Ser His Gly Asp Glu Arg Pro Ala Trp Leu Met Ser 1 5 10 • • Glu Thr Leu Arg His Leu His Thr His Phe Gly Ala Asp Tyr Asp Trp 20 25 30 Phe Phe Ile Met Gln Asp Asp Thr Tyr Val Gln Ala Pro Arg Leu Ala 35 40 45 Ala Leu Ala Gly His Leu Ser Ile Asn Gln Asp Leu Tyr Leu Gly Arg 50 55 60 Ala Glu Glu Phe Ile Gly Ala Gly Glu Gln Ala Arg Tyr Cys His Gly 70 75 80 Gly Phe Gly Tyr Leu Leu Ser Arg Ser Leu Leu Leu Arg Leu Arg Pro . 90 85 95 His Leu Asp Gly Cys Arg Gly Asp Ile Leu Ser Ala Arg Pro Asp Glu 100 105 110 Trp Leu Gly Arg Cys Leu Ile Asp Ser Leu Gly Val Gly Cys Val Ser 115 120 125 Gln His Gln Ala Gln Ile Arg Asn Leu Thr Val Leu Thr Pro Glu Gly 130 135 140 Glu Ala Gly Leu Ser Trp Pro Val Gly Leu Pro Ala Pro Phe Thr Pro 145 150 155 1.60 His Ser Arg Phe Glu Val Leu Gly Trp Asp Tyr Phe Thr Glu Gln His 165 170 . 175 . Thr Phe Ser Cys Ala Asp Gly Ala Pro Lys Cys Pro Leu Gln Gly Ala 180 185 190 Ser Arg Ala Asp Val Gly Asp Ala Leu Glu Thr Ala Leu Glu Gln Leu 195 200 205

Asn Arg Arg Tyr Gln Pro Arg Leu Arg Phe Gln Lys Gln Arg Leu Leu

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	-	210	•				215					220						
	Asn 225	Gly	Tyr	Arg	Arg	Phe 230	Asp	Pro	Ala	Arg	Gly 235	Met	Glu	Tyr	Thr	Leu 240		
	Asp	Pro	Gly	Ser	Thr 245	His	Ala	Ser	Glu	Arg 250	Gly	His	Arg	Arg	Ala 255	Leu		
	Ala	Arg	Arg	Val 260	Ser	Leu	Leu	Arg	Pro 265	Leu	Ser	Arg	Val	Glu 270	Ile	Leu		
	Pro	Met	Pro 275	Tyr	Val	Thr	Glu	Ala 280	Thr	Arg	Val	Gln	Leu 285	Val	Leu	Pro		
	Leu	Leu 290	Val	Ala	Glu	Ala	Ala 295	Ala	Ala	Pro	Ala	Phe 300	Leu	Glu	Ala	Phe		
	Ala 305	Ala	Asn	Val	Leu	Glu 310	Pro	Arg	Glu	His	Ala <sub>.</sub> 315	Leu	Leu	Thr	Leu	Leu 320		
	Leu	Val	Tyr	Gly	Pro 325	Arg	Glu	Gly	Gly	Arg 330	Gly	Ala	Pro	Asp	Pro 335	Phe		
•	Leu			340					345					350				
	Thr	Arg	Leu 355	Ala	Trp	Leu	Ala	Val 360	Arg	Ala	Glu	Ala	Pro 365	Ser	Gln	Val	· .	
	•	370			Val		375					380		•				
	385				Val	390			-		395					400		
			·		Ala 405					410				•	415			
				420	Asn				425					430				
		·	435		Gly			440		•			445					
		450			Pro		455					460						
	465				Tyr	470					475					480		
					Ala 485				•	490					495			
				500	Val				505					510				
			515		Gly			520					525					
	FIO	Arg	ьeu	ser	Glu	eru	гел	uyr.	His	Arg	Cys	Arg	Leu	Ser	Asn	Leu		•

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530 535 540 Glu Gly Leu Gly Gly Arg Ala Gln Leu Ala Met Ala Leu Phe Glu Gln 545 550 555 . 560 Glu Gln Ala Asn Ser Thr 565 <210> 1757 <211> 249 <212> PRT <213> Homo sapiens <220> <221> SITE . <222> (221) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (241) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (246) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1757 . Met Glu Phe Ser Trp Leu Glu Thr Arg Trp Ala Arg Pro Phe Tyr Leu 5 10 1 15 Ala Phe Val Phe Cys Leu Ala Leu Gly Leu Leu Gln Ala Ile Lys Leu 20 25 30 . Tyr Leu Arg Arg Gln Arg Leu Leu Arg Asp Leu Arg Pro Phe Pro Ala . 35 40 45 Pro Pro Thr His Trp Phe Leu Gly His Gln Lys Phe Ile Gln Asp Asp 60 50 55 Asn Met Glu Lys Leu Glu Glu Ile Ile Glu Lys Tyr Pro Arg Ala Phe 70 65 75 80 . Pro Phe Trp Ile Gly Pro Phe Gln Ala Phe Phe Cys Ile Tyr Asp Pro 90 • 85 95 Asp Tyr Ala Lys Thr Leu Leu Ser Arg Thr Asp Pro Lys Ser Gln Tyr 100 105 . Leu Gln Lys Phe Ser Pro Pro Leu Leu Gly Lys Gly Leu Ala Ala Leu 115 120 125 Asp Gly Pro Lys Trp Phe Gln His Arg Arg Leu Leu Thr Pro Gly Phe 130 135 140 His Phe Asn Ile Leu Lys Ala Tyr Ile Glu Val Met Ala His Ser Val 145 150 155 16.0

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Lys Met Met Leu Asp Lys Trp Glu Lys Ile Cys Ser Thr Gln Asp Thr 165 \_\_\_\_\_ 170 175 Ser Val Glu Val Tyr Glu His Ile Asn Ser Met Ser Leu Asp Ile Ile 180 185 190 Met Lys Cys Ala Phe Ser Lys Glu Thr Asn Cys Gln Thr Asn Ser Thr 200 195 205 His Asp Pro Tyr Ala Lys Ala Ile Leu Asn Ser Ala Xaa Ser Tyr Phe 210 -. 215 220 Thr Val Val Gln Leu Leu Tyr His Ser Asp Ile Phe Phe Lys Phe Ser 225 230 235 240 Xaa Gln Gly Tyr Arg Xaa Pro Glu Leu 245 . <210> 1758 · <211> 96 <212> PRT <213> Homo sapiens ٠. <220> <221> SITE <222> (74) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE . . <222> (88) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITĖ <222> (89) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (91) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1758 Ala Gln Gly His Pro Trp Ser Val Arg Thr Gln Leu Pro Arg Ile Pro 1 5 10 15 Arg Pro Ser Pro Met Thr Leu Gly Pro Gln Ile Leu Ile Cys His Ser 20 25 30 Gly Ser Ala Ala Gly Ser Arg Asn Cys Ile Gly Gln Glu Phe Ala Met 35 40 45 Ile Glu Leu Lys Val Thr Ile Ala Leu Ile Leu Leu His Phe Arg Val 50 55 . 60 .

Thr Pro Asp Pro Thr Arg Pro Leu Thr Xaa Pro Asn His Phe Ile Leu

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65	70	. 75	80
Lys Pro Lys A	sn Gly Met Tyr · 85	Xaa Xaa Leu Xaa Lys Leu 90	Ser Glu Cys 95
•		· ·	· . ·
<210> 1759 <211> 249 <212> PRT <213> Homo say	piens	• •	
<220> <221> SITE <222> (242) <223> Xaa equa	als any of the	naturally occurring L-a	mino acids
<220> <221> SITE <222> (247)			
<220> <221> SITE	als any of the	naturally occurring L-a	mino acids
<222> (248) <223> Xaa equa	als any of the	naturally occurring L-a	mino acids
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Ala Phe Val Pl	ne Cys Leu Ala 20	Leu Gly Leu Leu Gln Ala 25	Ile Lys Leu 30
Tyr Leu Arg An 35	rg Gln Arg Leu	Leu Arg Asp Leu Arg Pro 40 45	Phe Pro Ala
Pro Pro Thr Hi 50	is Trp Phe Leu 55	Gly His Gln Lys Phe Ile 60	Gln Asp Asp
Asn Met Glu Ly 65.	ys Leu Glu Glu 70	Ile Ile Glu Lys Tyr Pro 75	Arg Ala Phe 80
Pro Phe Trp I	le Gly Pro Phe 85	Gln Ala Phe Phe Cys Ile 90	Tyr Asp Pro 95
	ys Thr Leu Leu )0	Ser Arg Thr Asp Pro Lys 105	Ser Gln Tyr 110
Leu Gln Lys Pl 115	ne Ser Pro Pro	Leu Leu Gly Lys Gly Leu 120 125	Ala Ala Leu
Asp Gly Pro Ly 130	ys Trp Phe Gln 135	His Arg Arg Leu Leu Thr 140	Pro Gly Phe
His Phe Asn I] 145 ·	le Leu Lys Ala 150	Tyr Ile Glu Val Met Ala 155	His Ser Val 160

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Lys Met Met Leu Asp Lys Trp Glu Lys Ile Cys Ser Thr Gln Asp Thr 165 170 175 Ser Val Glu Val Tyr Glu His Ile Asn Ser Met Ser Leu Asp Ile Ile 180 185 190 Met Lys Cys Ala Phe Ser Lys Glu Thr Asn Cys Gln Thr Asn Ser Thr 195 200 205 -His Asp Pro Tyr Ala Lys Ala Ile Phe Glu Leu Ser Lys Ile Ile Phe 210 215 220 His Arg Leu Tyr Ser Cys Cys Ile Thr Val Thr Tyr Phe Ser Asn Ser 225 230 235 . 240 • Ala Xaa Arg Val Thr Val Xaa Xaa Ser 245 <210> 1760 <211> 509 <212> PRT <213> Homo sapiens <400> 1760 Met Glu Phe Ser Trp Leu Glu Thr Arg Trp Ala Arg Pro Phe Tyr Leu 1 5 10 15 Ala Phe Val Phe Cys Leu Ala Leu Gly Leu Leu Gln Ala Ile Lys Leu 20 . 25 , . 30 Tyr Leu Arg Arg Gln Arg Leu Leu Arg Asp Leu Arg Pro Phe Pro Ala 35 40 45 Pro Pro Thr His Trp Phe Leu Gly His Gln Lys Phe Ile Gln Asp Asp 50 . 55 60 Asn Met Glu Lys Leu Glu Glu Ile Ile Glu Lys Tyr Pro Arg Ala Phe 65 70 75 80 Pro Phe Trp Ile Gly Pro Phe Gln Ala Phe Phe Cys Ile Tyr Asp Pro 85 90 . 95 Asp Tyr Ala Lys Thr Leu Leu Ser Arg Thr Asp Pro Lys Ser Gln Tyr 100 105 110 Leu Gln Lys Phe Ser Pro Pro Leu Leu Gly Lys Gly Leu Ala Ala Leu 115 120 125 Asp Gly Pro Lys Trp Phe Gln His Arg Arg Leu Leu Thr Pro Gly Phe 130 135 . ر **14**0 His Phe Asn Ile Leu Lys Ala Tyr Ile Glu Val Met Ala His Ser Val 145 150 155 160 . Lys Met Met Leu Asp Lys Trp Glu Lys Ile Cys Ser Thr Gln Asp Thr 165 . 170 175 .

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Ser	Val	Glu	Val 180	Tyr	Glu	His	Ile	Asn 185	Ser	Met	Ser	Leu	Asp 190	Ile	Ile
Met	Lys	Cys 195	Ala	Phe	Ser	Lys	Glu 200	Thr	Asn	Cys	Gln	Thr 205	Asn	Ser	Thr
His	Asp 210	Pro	Tyr	Ala	Lys	Ala 215	Ile	Phe	Glu	Leu	Ser 220	Lys	Ile	Ile	Phe
His 225	Arg	Leu	Tyr	Ser	Leu 230	Leu	Tyr	His	Ser	Asp 235	Ile	Ile	Phe	Lys	Leu 240
Ser	Pro	Gln	Gly	Tyr 245	Arg <sub>.</sub>	Phe	Gln	Lys	Leu 250	Ser	Arg	Val	Leu	Asn 255	Gln
Tyr	Thr	Asp	Thr 260	Ile	Ile	Gln	Glu	Arg 265	Lys	Lys	Ser	Leu	Gln 270	Ala	Gly
Val	Lys	Gln 275	Asp	Asn	Thr	Pro	Lys 280	Arg	Lys	Tyr	Gl'n	Asp 285	Phe	Leu	Asp
Ile	Val 290	Leu	Ser	Ala	Lys	Asp 295	Glu	Ser	Gly	Ser	Ser 300	Phe	Ser	Asp	Ile
Asp 305	Val	His	Ser	Glu	Val 310	Ser	Thr	Phe	Leu	Leu 315	Ala	Gly	His	Asp	Thr 320
Leu	Ala	Ala	Ser	Ile 325	Ser	Trp	Ile	Leu	Tyr 330	Cys	Leu	Ala	Leu	Asn 335	Pro
Glu	His	Gln	Glu 340	Arg	Cys	Arg .	Glu	Glu 345	Val	Arg	Gly	Ile	Leu 350	Gly	Asp
Gly	Ser	Ser 355	Ile	Thr	Trp	Asp	Gln. 360	Leu	Gly	Glu	Met	Ser 365	Tyr	Thr	Thr
Met	Cys 370	Ile	Lys	Glu	Thr	Cys 375	Arg	Leu	Ile	Pro	Ala 380	Val	Pro	Ser	Ile
385	Arg				390					395					400
Pro	Ala	Gly	Ile	Thr 405	Val	Val	Leu	Ser	Ile 410	Trp	Gly	Leu		His 415	Asn
Pro <sub>.</sub>	Ala	Val	Trp 420	Lys	Asn -	Pro	Lys	Val 425	Phe	Asp	Pro	Leu	Arg 430	Phe	Ser .
Gln	Glu	Asn 435	Ser	Asp	Gln	Arg	His 440	Pro	Tyr	Ala	Tyr	Leu 445	Pro	Phe	Ser .
Ala	Gly 450	Ser	Arg	Asn	Cys	Ile 455	Gly	Gln	Glu		Ala 460	Met	Ile	Glu	Leu
Lys 465	Val	Thr	Ile	Ala	Leu 470	Ile	Leu	Leu	His	Phe 475	Årg	Val	Thr	Pro	Asp 480
Pro	Thr	Arg	Pro	Leu 485	Thr	Phe	Pro	Asn	His 490	Phe	Ile	Leu	Lys	Pro 495	Lys

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Asn Gly Met Tyr Leu His Leu Lys Lys Leu Ser Glu Cys 500 505

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Asn Ile Pro Asp Met Leu Gln Ser Leu Val Gly Gln Gln Asn Ala Arg 85 90 95 His Gly Ile Ile Lys Ile Phe Asn Ala Leu Gln Glu Thr Arg Ala Asn 100 105 110 Lys His Leu Leu Tyr Ala Leu Met Glu Leu Leu Leu Ile Glu Leu Cys 115 . 120 125 Pro Glu Leu Arg Val His Leu Asp Gln Leu Lys Ala Gly Gln Val 130 135 140 <210> 1763 <211> 88 <212> PRT <213> Homo sapiens <400> 1763 Met Lys Ser Leu Ile Lys Thr Tyr Phe Leu Leu Trp Thr Leu Lys Lys 1 5 . 10 . 15 Leu Leu Pro Leu Ser Thr Leu Ile Pro Ile Met Leu Ser Pro Leu Asp 20 · 25 30 Ile Phe Phe Ser Asp Asn Pro His Ile Asp Cys Ser Gly His His Phe 35 40 45 Val Pro Tyr Leu Leu Ile Gly Leu Asp. Thr Asp Pro Gln Phe Thr Cys 55 · 50 60 Leu Tyr Leu Leu Ile Leu Thr Leu Leu Val Phe Val Phe Ser Leu Thr 65 70 75 80 : Leu Leu Ser Pro Pro Ser Pro Gly 85 <210> 1764 <211> 88 <212> PRT <213> Homo sapiens <400> 1764 •. Met Lys Ser Leu Ile Lys Thr Tyr Phe Leu Leu Trp Thr Leu Lys Lys 10 . 15 1. 5 Leu Leu Pro Leu Ser Thr Leu Ile Pro Ile Met Leu Ser Pro Leu Asp 20 25 30 Ile Phe Phe Ser Asp Asn Pro His Ile Asp Cys Ser Gly His His Phe 35 40 45 Val Pro Tyr Leu Leu Ile Gly Leu Asp Thr Asp Pro Gln Phe Thr Cys 50 55 60 Leu Tyr Leu Leu Ile Leu Thr Leu Leu Val Phe Val Phe Ser Leu Thr

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Ser Lys Lys Asn Gly Thr Arg Ser Pro Pro Arg Pro Ser Pro Gly Gly . 75 65 70 80 Leu His Tyr Ser Asp Glu Asp Ile Cys Asn Lys Tyr Asn Gly Ala Val 85 90 95 Leu Thr Glu Ser Val Ser Leu Lys Glu Lys Ser Ala Asp Ala Ser Glu 100 105 110 . Ser Glu Ala Thr Asp Ser Asp Tyr Glu Asp Ala Leu Pro Lys His Ser 115 120 125 Phe Val Asn His Tyr Met Ser Asp Pro Thr Tyr Tyr Asn Ser Trp Lys 130 135 140 Arg Xaa Ala Gln Gly Pro Arg Thr Cys Ala Ala Gln Val Arg Gly Gly 145 150 155 160 Gly Gly Leu Arg Gly Gly Arg Ala Ala Ala Pro Gly His His Ala 165 170 · 175 Xaa Arg Gly Arg Arg Leu His Pro Arg Trp Pro Arg Arg Ala Asn Phe 185 180 190 Xaa Tyr Arg Leu Leu Leu Xaa Arg Val Ser Lys Ser Ala Ala Leu Xaa 195 200 205 Gln Gly Gly Thr Glu Ala Thr Phe Arg Ser Leu Phe Leu Xaa Arg Gln 210 215 . 220 Phe Asn Ser Asn Lys Leu Xaa 225 230 <210> 1766 <211> 127 <212> PRT <213> Homo sapiens <400> 1766 Glu Gly Phe Phe Lys Arg Leu Phe Val Thr Ser Leu Gln Glu Ala Gly 1 5 10 Leu Phe Leu Phe Leu Phe Leu Arg Glu Gly Val Phe His Trp Cys 20 25 30 Asn Gly Leu Ala Pro Pro Gly Pro Gly Arg Thr Ser Asp Leu Pro Ser 35 40 45 Pro Gly Phe Leu Arg Leu Gln Asp Gln Leu Gly Arg Val Lys Arg Gly . 50 55 60

Glu Gly Val Glu Gly Gln Val Arg Ser Gln Ser Cys Pro Gly Arg Pro65707580Pro Ser Leu Ser Thr Ser Ser Ser Arg Glu Pro Ala Ala His Thr Leu859095

Leu Asn Ala Gly His Pro Arg Arg Leu Leu Gly Phe Glu Glu Gln Thr

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100 105 110 Phe Phe Pro Gly Leu Ser Ala Phe Cys Pro Asn Phe Ile Cys Phe 115 120 125 <210> 1767 <211> 240 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (192) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (222) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (235) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1767 Met Ala Leu Ser Ser Leu Ile Val Ile Leu Leu Val Val Phe Ala Leu 1 5 10 15 Val Leu His Gly Gln Asn Lys Lys Tyr Lys Asn Cys Ser Thr Gly Lys 20 25 30 . Gly Ile Ser Thr Met Glu Glu Ser Val Thr Leu Asp Asn Gly Gly Phe 35 40 ·45 Ala Ala Leu Glu Leu Ser Ser Arg His Leu Asn Val Lys Ser Thr Phe 50 55 60 Ser Lys Lys Asn Gly Thr Arg Ser Pro Pro Arg Pro Ser Pro Gly Gly 65 70 . . 75 80 Leu His Tyr Ser Asp Glu Asp Ile Cys Asn Lys Tyr Asn Gly Ala Val 85 90 Leu Thr Glu Ser Val Ser Leu Lys Glu Lys Ser Ala Asp Ala Ser Glu 100 105 110 Ser Glu Ala Thr Asp Ser Asp Tyr Glu Asp Ala Leu Pro Lys His Ser 115 120 . 125 Phe Val Asn His Tyr Met Ser Asp Pro Thr Tyr Tyr Asn Ser Trp Lys 130 140 135 . Arg Arg Ala Gln Gly Pro Arg Thr Cys Ala Ala Gln Val Arg Gly Gly 145 150 155 160 Gly Gly Leu Arg Gly Gly Arg Ala Ala Ala Pro Gly His His Ala 165 . 170 175

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Glu Arg Gly Arg Arg Leu His Pro Arg Trp Pro Arg Arg Ala Asn Xaa 180 185 190 Ala His Arg Leu Leu Leu Arg Val Ser Lys Ala Pro Arg Leu Pro 195 200 205 Gln Gly Gly Thr Glu Ala Thr Phe Arg Ser Leu Phe Leu Xaa Arg Gln 210. 215 220 Ser Thr Pro Ile Thr Glu Leu Lys Phe Leu Xaa Lys Lys Lys Ile 225 230 235 240 <210> 1768 <211> 96 <212> PRT <213> Homo sapiens <400> 1768 Met Tyr Leu Pro Cys Gln Met Ala Cys Ser Leu Phe Val Leu Phe Val 1 5 10 15 Ile Trp Leu Leu Lys Ile Phe Gln Ala Gly Pro Gln Leu Met Ser 20 25 30 Leu Ala His Gly Ser Ala Thr Leu Val Leu Asp Gly Met Asn Ile Phe 35 40 45 . Gly Pro Ser Gly Tyr Gly Gln Glu Cys Arg Val Ala Cys Asn Tyr Phe 50 55 60 Arg Lys Cys Arg Val Pro Ser Trp Ala Arg Cys Leu Met Pro Val Ile 65 70 75 80 Pro Ala Leu Trp Glu Ala Glu Ala Ala Asp Gln Leu Arg Leu Gly Val 95 <sup>·</sup> 85 90 <210> 1769 <211> 57 <212> PRT <213> Homo sapiens <400> 1769 Leu Tyr Gln Glu Lys Pro Leu Met Trp Pro Arg Thr Ser Leu Leu Tyr 1 5 10 15 Val Val Pro Arg Trp Leu Leu Pro Cys Ser Ser Leu Pro Cys Pro Leu 20 25 . 30 Pro Glu Ile Lys Asn Ser Leu Thr Glu Lys Lys Lys Lys Lys Lys

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1130

Asp Glu Glu 275

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· 1131

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Leu Val V 65	Val Val	Lys Asr 70		Lys	Ile	Val	Gly 75	Leu	His	Cys	Ser	Ser 80
Glu Asp 1	Leu His	Ala Gly 85	Gln	Ile	Ala	Leu 90	Ile	Lys	His	Gly	Ser 95	Arg
Leu Lys i	Asn Cys 100	Asp Leu	ı Tyr	Phe	Ser 105	Arg	Lys	Pro	Суз	Ser 110	Ala	Cys
Leu Lys 1	Met Ile 115	Val Asn	. Ala	Gly 120	Val	Asn	Arg	Ile	Ser 125	Tyr	Trp	Pro
Ala Asp 1 130	Pro Glu	Ile Ser	Leu 135	Leu	Thr	Glu	Ala	Ser 140	Ser	Ser	Glu	Asp
Ala Lys I 145	Leu Asp	Ala Lys 150		Val	Glu	Arg	Leu 155	Lys	Ser	Asn	Ser	Arg 160
Ala His N	Val Cys	Val·Leu 165	Leu ·	Gln	Pro	Leu 170	Val	Cys	Tyr	Met	Val 175	Gln
Phe Val 0	Glu Glu 180	Thr Ser	Tyr	Lys	Cys 185	Asp	Phe	Ile	Gln	Ĺys 190	Ile	Thr
Lys Thr I	Leu Pro 195	Asp Ala	. Asn	Thr 200	Asp	Phe	Tyr		Glu 205		Lys	Gln
Glu Arg 1 210	Ile Lys	Glu Tyr	Glu 215	Met	Leu	Lys	Lys	Lys 220	Lys	Lys		
<210> 177 <211> 105 <212> PR1 <213> Hom <220> <221> SI1 <222> (71 <223> Xaa	5 · r no sapie re L)		the	natu	urall	-y oc	curr	ring	L-an	ino	ació	ls
<220> <221> SIT <222> (10 <223> Xaa	re <sup>.</sup> )4)											
<400> 177 Ile Leu I 1		Leu Lys 5	Val	Trp	Ser	Phe 10	Gln	Leu	Phe	Gln	Ile 15	Ala
Val Cys A	Asp Phe 20	Ser His	Phe	Tyr	Leu 25	Leu	Arg	Asn	Ile	His 30	Lys	Ile
Ile Pro I	ys Met 35	Lys Val	His	Phe 40	Leu	Phe	Ser	Pro	Arg 45	Leu	Glu	Arg
Gly Gly I	Leu Gly	Cys Phe	Met	Arg	Asn	Val	Phe	Leu	Asp	Leu	Arg	Trp

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Ser Gly Leu Pro Leu Leu Xaa Phe Pro Ala Phe Pro Pro His His Thr 65. Ala Ser Leu Gly Phe Leu Pro Val Ser Gln Asn Tyr Thr His Asp His , **8**5 Pro Asn Ile Gly Ser Met Pro Xaa Leu <210> 1778 <211>.489 <212> PRT <213> Homo sapiens <400> 1778 Met Thr Gly Gln Ile Pro Arg Leu Ser Lys Val Asn Leu Phe Thr Leu Leu Ser Leu Trp Met Glu Leu Phe Pro Ala Glu Ala Gln Arg Gln Lys · 20 Ser Gln Lys Asn Glu Glu Gly Lys His Gly Pro Leu Gly Asp Asn Glu Glu Arg Thr Arg Val Ser Thr Asp Lys Arg Gln Val Lys Arg Thr Gly Leu Val Val Val Lys Asn Met Lys Ile Val Gly Leu His Cys Ser Ser Glu Asp Leu His Ala Gly Gln Ile Ala Leu Ile Lys His Gly Ser Arg Leu Lys Asn Cys Asp Leu Tyr Phe Ser Arg Lys Pro Cys Ser Ala Cys Leu Lys Met Ile Val Asn Ala Gly Val Asn Arg Ile Ser Tyr Trp Pro Ala Asp Pro Glu Ile Ser Leu Leu Thr Glu Ala Ser Ser Ser Glu Asp Ala Lys Leu Asp Ala Lys Ala Val Glu Arg Leu Lys Ser Asn Ser Arg Ala His Val Cys Val Leu Leu Gln Pro Leu Val Cys Tyr Met Val Gln Phe Val Glu Glu Thr Ser Tyr Lys Cys Asp Phe Ile Gln Lys Ile Thr Lys Thr Leu Pro Asp Ala Asn Thr Asp Phe Tyr Tyr Glu Cys Lys Gln Glu Arg Ile Lys Glu Tyr Glu Met Leu Phe Leu Val Ser Asn Glu Glu 215 . 

Met His Lys Gln Ile Leu Met Thr Ile Gly Leu Glu Asn Leu Cys Glu Asn Pro Tyr Phe Ser Asn Leu Arg Gln Asn Met Lys Asp Leu Ile Leu Leu Leu Ala Thr Val Ala Ser Ser Val Pro Asn Phe Lys His Phe Gly Phe Tyr Arg Ser Asn Pro Glu Gln Ile Asn Glu Ile His Asn Gln Ser Leu Pro Gln Glu Ile Ala Arg His Cys Met Val Gln Ala Arg Leu Leu Ala Tyr Arg Thr Glu Asp His Lys Thr Gly Val Gly Ala Val Ile Trp . 320 Ala Glu Gly Lys Ser Arg Ser Cys Asp Gly Thr Gly Ala Met Tyr Phe Val Gly Cys Gly Tyr Asn Ala Phe Pro Val Gly Ser Glu Tyr Ala Asp Phe Pro His Met Asp Asp Lys Gln Lys Asp Arg Glu Ile Arg Lys Phe Arg Tyr Ile Ile His Ala Glu Gln Asn Ala Leu Thr Phe Arg Cys Gln Glu Ile Lys Pro Glu Glu Arg Ser Met Ile Phe Val Thr Lys Cys Pro · 400 Cys Asp Glu Cys Val Pro Leu Ile Lys Gly Ala Gly Ile Lys Gln Ile . Tyr Ala Gly Asp Val Asp Val Gly Lys Lys Lys Ala Asp Ile Ser Tyr Met Arg Phe Gly Glu Leu Glu Gly Val Ser Lys Phe Thr Trp Gln Leu . 435 • 445 Asn Pro Ser Gly Ala Tyr Gly Leu Glu Gln Asn Glu Pro Glu Arg Arg Glu Asn Gly Val Leu Arg Pro Val Pro Gln Lys Glu Glu Gln His Gln Asp Lys Lys Leu Arg Leu Gly Ile His 

<210> 1779 <211> 267 <212> PRT <213> Homo sapiens <400> 1779

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Met Thr Gly Gln Ile Pro Arg Leu Ser Lys Val Asn Leu Phe Thr Leu 5 10 15 Leu Ser Leu Trp Met Glu Leu Phe Pro Ala Glu Ala Gln Arg Gln Lys 20 25 30 Ser Gln Lys Asn Glu Glu Gly Lys His Gly Pro Leu Gly Asp Asn Glu 35 . 40 45 Glu Arg Thr Arg Val Ser Thr Asp Lys Arg Gln Val Lys Arg Thr Gly 50 55 60 Leu Val Val Val Lys Asn Met Lys Ile Val Gly Leu His Cys Ser Ser 65 · 70 75 80 Glu Asp Leu His Ala Gly Gln Ile Ala Leu Ile Lys His Gly Ser Arg 85 90 Leu Lys Asn Cys Asp Leu Tyr Phe Ser Arg Lys Pro Cys Ser Ala Cys 100 . 1.05 110 Leu Lys Met Ile Val Asn Ala Gly Val Asn Arg Ile Ser Tyr Trp Pro 115 120 125 Ala Asp Pro Glu Ile Ser Leu Leu Thr Glu Ala Ser Ser Ser Glu Asp 130 . 135 140 Ala Lys Leu Asp Ala Lys Ala Val Glu Arg Leu Lys Ser Asn Ser Arg 145 150 155 160 Ala His Val Cys Val Leu Leu Gln Pro Leu Val Cys Tyr Met Val Gln 165 170 175 Phe Val Glu Glu Thr Ser Tyr Lys Cys Asp Phe Ile Gln Lys Ile Thr 180 185 190 Lys Thr Leu Pro Asp Ala Asn Thr Asp Phe Tyr Tyr Glu Cys Lys Gln 195 200 . 205 Glu Arg Ile Lys Glu Tyr Glu Met Leu Phe Leu Val Ser Asn Glu Glu 210 215 220 Met His Lys Gln Ile Leu Met Thr Ile Gly Leu Glu Asn Leu Cys Glu 225 230 235 240 Asn Pro Tyr Phe Ser Asn Leu Arg Gln Asn Met Lys Asp Leu Ile Leu - 245 250 · 255 Leu Leu Ala Thr Val Ala Ser Met Cys Arg Leu . 260 265

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